

157076

JPRS-TEP-85-007

8 April 1985

# Worldwide Report

## EPIDEMIOLOGY

**DISTRIBUTION STATEMENT A**  
Approved for Public Release  
Distribution Unlimited

19990414025

DTIC QUALITY INSPECTED 3

**FBIS**

FOREIGN BROADCAST INFORMATION SERVICE

REPRODUCED BY  
**NATIONAL TECHNICAL  
INFORMATION SERVICE**  
U.S. DEPARTMENT OF COMMERCE  
SPRINGFIELD, VA. 22161

6  
108  
Ad6

#### NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

#### PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

8 April 1985

WORLDWIDE REPORT  
EPIDEMIOLOGY

CONTENTS

HUMAN DISEASES

BANGLADESH

<b>Briefs</b>		
Leprosy in Rangpur		1

BARBADOS

<b>Briefs</b>		
Gastroenteritis 'Epidemic'		2

BRAZIL

Incidence of Diseases Nationwide Discussed (Letania Menezes; ISTOE, 13 Feb 85)	.....	3
---	-------	---

<b>Briefs</b>		
Leishmaniasis Incidence in Manaus		7
Rare Disease Resurgence		7

BRUNEI

<b>Briefs</b>		
Mosquito Virus Kills Two		9

BURUNDI

Epidemiology Comparison Statistics Reported (LE RENOUVEAU DU BURUNDI, 29 Nov 84)	.....	10
---	-------	----

COLOMBIA

<b>Briefs</b>		
Situation 'Normal' in El Bagre		12

CONGO

Briefs  
Diarrhea Prevention 13

DENMARK

35 Cases of Meningitis Reported in December 1984  
(AKTUELDT, 16 Jan 85) ..... 14

Girl Dies of Diphtheria in Copenhagen Area  
(AKTUELDT, 24 Jan 85) ..... 15

Minister Urges Funds To Start Nationwide Measles Vaccination  
(Thorkild Dahl; BERLINGSKE TIDENDE, 20 Jan 85) ..... 16

ECUADOR

Briefs  
Malaria Cases Reported 18

ETHIOPIA

Briefs  
Immunization Intensified 19

GHANA

Measles Epidemic Claims Many Lives  
(Joe Okyere; PEOPLE'S DAILY GRAPHIC, 18 Feb 85) ..... 20

GREECE

Briefs  
Incidence of Aids 21

GUINEA

Briefs  
Anti-Measles Vaccination 22

GUYANA

Public Health Veterinary Unit's Plans Discussed  
(Vanessa Cort; GUYANA CHRONICLE, 28 Jan 85) ..... 23

Briefs  
Typhoid Outbreak 25  
Filaria Clinics 25

HONG KONG

First Local AIDS Victim Diagnosed; More Anticipated (Various sources, 5 Feb 85) .....	26
Former U.S. Resident, by Adam Kelliher Doctors' Assessment, by Chiu Kit-Ying	

INDIA

Paper Gives Statistics on Meningitis in Delhi (PATRIOT, 16 Feb 85) .....	28
Incidence of Polio Among Children Reported (THE STATESMAN, 14 Feb 85) .....	29
Briefs	
Malaria in Calcutta	31
Jaundice in Surat	31

INDONESIA

Briefs	
Dengue in Jakarta	32

IRELAND

Minister of Health Discounts Impact of Health Fund Cuts (IRISH INDEPENDENCE, 27 Feb 85) .....	33
--	----

ISRAEL

Briefs	
New Dysentery Strain	34

KENYA

Briefs	
Mystery Illness in Machakos	35
Cholera Deaths	35

MAURITIUS

Briefs	
Infectious Hepatitis Reported	36

MEXICO

Briefs	
Antidengue Measures Underway	37

MONTSERRAT

Plan To Treat Tourists' Herpes Stirs Political Row (THE MONTSERRAT TIMES, 18 Jan 85) .....	38
Public Outcry, Party Reactions	
Editorial Comment	

MOZAMBIQUE

Briefs	
Norwegian Health Assistance	41
EEC Provides Two Projects Assistance	41
Two Die of Strange Fever	41

NIGER

Briefs	
Onchocerciasis Measures Show Success	42

NIGERIA

Government Program Aims To Control Tsetse Flies (DAILY TIMES, 30 Jan 85) .....	43
Borno State Governor: Immunization Program Not Successful (Abdullahi Idris; NEW NIGERIAN, 31 Jan 85) .....	45

Briefs	
Rabies Kills People, Animals	46
Measles Kills 35 Persons	46
Whooping Cough Kills 55	47

NORWAY

Study Finds Twelve Percent of Hemophiliac Males With AIDS Virus (AFTENPOSTEN, 20 Feb 85) .....	48
---	----

PAKISTAN

Institute for Cancer Patients Said Almost Ready (Saeed Qureshi; THE MUSLIM, 4 Feb 85) .....	50
--	----

PEOPLE'S REPUBLIC OF CHINA

Polio, Measles Decline Sharply in Beijing (XINHUA, 24 Feb 85) .....	52
Li Desheng Urges Attention to Endemic Disease (XINHUA Domestic Service, 12 Mar 85) .....	53
Molecular Epidemiology of Rotaviruses Described (ZHONGHUA WEISHENGWUXUE HE MIANYIXUE ZAZHI, No 6, Dec 84)	54

HBV-DNA Determined by Molecular Hybridization (He Chao, et al.; JIEFANGJUN YIXHUE ZAZHI, No 6, 20 Dec 84)	55
Vaccinia Virus Genome Cloned (Yang Xink, et al.; ZHONGGUO YIXUE KEXUEYUAN XUEBAO, No 6, 15 Dec 84) .....	56
Radioimmunoassay for HBsAg Detection Studied (Zhang Lian, et al.; JIEFANGJUN YIXUE ZAZHI, No 6, 20 Dec 84) .....	57
Virus Antibodies Investigated (Tian Xin, et al.; JIEFANGJUN YIXUE ZAZHI, No 6, 20 Dec 84)	58
<b>Briefs</b>	
Malaria in Southern China	59
<b>PHILIPPINES</b>	
<b>Briefs</b>	
Sharp Increase in Tuberculosis	60
<b>PORTUGAL</b>	
Increase in TB Cases Causes Concern (Various sources, various dates) .....	61
Active Measures Needed Cases Double in Guarda	
<b>Briefs</b>	
Outbreak of Measles Predicted	63
<b>POLAND</b>	
Tuberculosis Incidence on Rise (Ireneusz Szyszko Interview; DZIENNIK LUDOWY, 19 Dec 84)	64
Recent Advances in Epidemiological Research Summarized (PRZEGLAD EPIDEMIOLOGICZNY, No 3, 1984) .....	68
Isolation of Salmonella Strains, by J. Peconeck	68
Screening for Lambliasis, by M. Lisowska, L. Milobedzka	68
Environmental Health Survey, by M. Krzyzanowski	69
Mortality Rates in Industrial Town, by M. Krzyzanowski, M. Wysocki	69
Trichinosis Outbreak in Radom Area, by Z. Anusz, et al.	69
Polio Vaccine Studies, by Z. Jarzabek, M. Kantoch	70
<b>SOUTH AFRICA</b>	
Epidemic Risk in Crossroads Say Officials (RAND DAILY MAIL, 21 Feb 85) .....	71

TRINIDAD AND TOBAGO

Children Die as Gastroenteritis Shows Sharp Increase (Various sources, various dates) .....	73
Report on Deaths	
Oral Rehydration Units	
County Council's Concern	

UNITED KINGDOM

New Government Measure Will Allow Hospitals To Hold AIDS Victims (John Fisher; YORKSHIRE POST, 21 Feb 85) .....	75
Briefs	
Deaths From AIDS	76

ZIMBABWE

Crackdown on Rabies, Vaccinations Enforced (THE HERALD, various dates) .....	77
Six People Attacked in Harare	
Buhera Rabid Hyena Terror	
Public Education Campaign	
Outbreak of Malaria in Chiredzi (THE CHRONICLE, 25 Feb 85) .....	80
Briefs	
Tsetse Fly Plea to OAU	82

ANIMAL DISEASES

AUSTRALIA

Briefs	
Anthrax Outbreak in Gippsland	83

DENMARK

Briefs	
Aujeszczkys Disease Attacks Swine	84

IRELAND

Vets, Government in Wrangle Over the Eradication Program (P. J. Cunningham; IRISH INDEPENDENT, 16, 18 Feb 85) ...	85
Vets' Boycott, Call for Probe	
Ongoing Dispute	

NIGERIA

Expected Influx of Cattle May Spread Disease (Boko Mohammed; SUNDAY TRIUMPH, 17 Feb 85) .....	87
Federal Government Gives Anti-Rinderpest Equipment to Kaduna (Dupe Motojehi; NEW NIGERIAN, 21 Feb 85) .....	88
<b>Briefs</b>	
Gongola Cattle Vaccinations	89
Cattle Vaccinated in Benue	89

UGANDA

<b>Briefs</b>	
Swine Fever Hits Mbale	90

PLANT DISEASES AND INSECT PEST

BANGLADESH

Papers Report Damage to Crops From Pests (Various sources, various dates) .....	91
Report From Faridganj Paddy, Potato, Wheat Damaged	

ISRAEL

<b>Briefs</b>	
Cotton Leaf Worm Pesticide	92

MALAYSIA

Leaf Hopper Threatens Rice Crop (P. Parameswaran; NEW STRAITS TIMES, 18 Feb 85) .....	93
--	----

VIETNAM

Communiqué Issued on Rice Blast, Insect Damage (Hanoi Domestic Service, 4 Mar 85) .....	95
--	----

<b>Briefs</b>	
Thai Binh Rice Insects	96

ZAMBIA

Outbreak of Disease Affects Cassava Plants (Beatrice Mwali; TIMES OF ZAMBIA, 4 Mar 85) .....	97
Industrial Pollution Destroys Agriculture (TIMES OF ZAMBIA, 7 Mar 85) .....	99

JPRS-TEP-85-007  
8 April 1985

BANGLADESH

BRIEFS

LEPROSY IN RANGPUR--Nilphamari, Jan 31--Leprosy is on increase here. Roughly 13 persons out of 1000 are affected by this disease in the greater Rangpur and the greater Dinajpur districts. This was disclosed by Mr Egadel, Administrator, Nilphamari based Bangladesh Mission Leprosy Hospital in a conference of the local journalists recently. It is learnt that Rangpur and Dinajpur districts have 27 thousand and 16 thousand leprosy affected persons respectively. It is also gathered that the number of leprosy patients in Bangladesh now stands at 2 lakh with three hospitals at Sylhet, Chittagong and Nilphamari. Many foreign missions and organisations have been rendering voluntary treatment for this disease since 1975 by opening 19 centres at Nilphamari, Thakurgaon, Panchagar, Lalmonirhat, Rangpur, Sadar and Kurigram districts. Leprosy is an infectious disease. As a result many leprosy patients conceal it and do not get treatment from hospitals, it is learnt. The leprosy patients coming to Nilphamari Hospital from different areas of Bangladesh beg from door to door. As a result the disease is spreading greatly in this region, the experienced circle commented. It is learnt from a source of Danish-Bangladesh Mission and government run Nilphamari leprosy Hospital that new patients mostly from rich class, are pouring forth every day. The people of Nilphamari are now afraid of this horrible situation. [Text] [Dhaka THE BANGLADESH OBSERVER in English 2 Feb 85 p 13]

CSO: 5450/0087

BARBADOS

BRIEFS

GASTROENTERITIS 'EPIDEMIC'--Bridgetown, Thurs., (Cana): Health officials here say an outbreak of gastroenteritis, affecting mainly children under five, has reached epidemic proportions. At least one death, that of a ten-month old baby, this week, has been reported, since cases of the illness started to rise mysteriously late last year. Admissions to the Queen Elizabeth Hospital, the largest in the island, rose from an average four a week to 612 last month. Total for February was 431, so far. After weeks of tests, acting chief medical officer, Dr. Beverley Miller, announced yesterday that the outbreak was caused by the rota virus, described as mild. Consultant paediatrician at the hospital, Dr. Bertie Graham, told reporters that though the outbreak was probably the largest in the 20-year history of the State-run hospital, that did not mean it was severe, and there was no cause for undue alarm. "It is a nuisance, rather than a threat," he said. No child who received early and adequate treatment should die from the disease, Dr. Graham added. He said signs of gastro-enteritis were vomiting, fever and symptoms of upper respiratory tract infection.. [Text] [Port-of-Spain TRINIDAD GUARDIAN in English 22 Feb 85 p 5].

CSO: 5440/041

BRAZIL

INCIDENCE OF DISEASES NATIONWIDE DISCUSSED

Sao Paulo ISTOE in Portuguese 13 Feb 85 pp 35,37

[Article by Letania Menezes]

[Text] After creating a panic among the population of Rio de Janeiro and causing thousands of deaths in the first decades of this century, the threat of yellow fever is again hanging over the city. There has been an invasion of the Aedes Aegypti mosquito, the carrier of this scourge and also the more benign dengue fever. If just one infected person arrived in Rio and were bitten by the mosquito, this is all it would take to spread one or the other of the two diseases among the "Cariocas." The warning was sounded by scientists and public health authorities during the 21st Congress of the Brazilian Society of Tropical Medicine, held last week in Sao Paulo. This was not the only bad news, however. According to the scientists, malaria, which was practically eradicated from the country in 1950, is reappearing with surprising force, going from 52,000 cases in 1970 to 342,000 cases last year. As if these torments were not enough, the fragile health of the Brazilian is confronted with a new challenge: kala-azar [Leishmaniasis], a disease which, up to now, had been confined to the rural area, is spreading to the major northeastern cities in alarming fashion. Offsetting this dispiriting picture is the progress in the control of two old and devastating endemic diseases: Chagas disease and schistosomiasis. The "barber bug" has been practically eradicated from the south of the country, announced sanitarian Jose Taquarussu Fiusa Lima, aged 40, superintendent of SUCAM (Superintendency of Public Health Campaigns), of the Ministry of Health, who is enthusiastic about the results of the battle against the Chagas disease carrier.

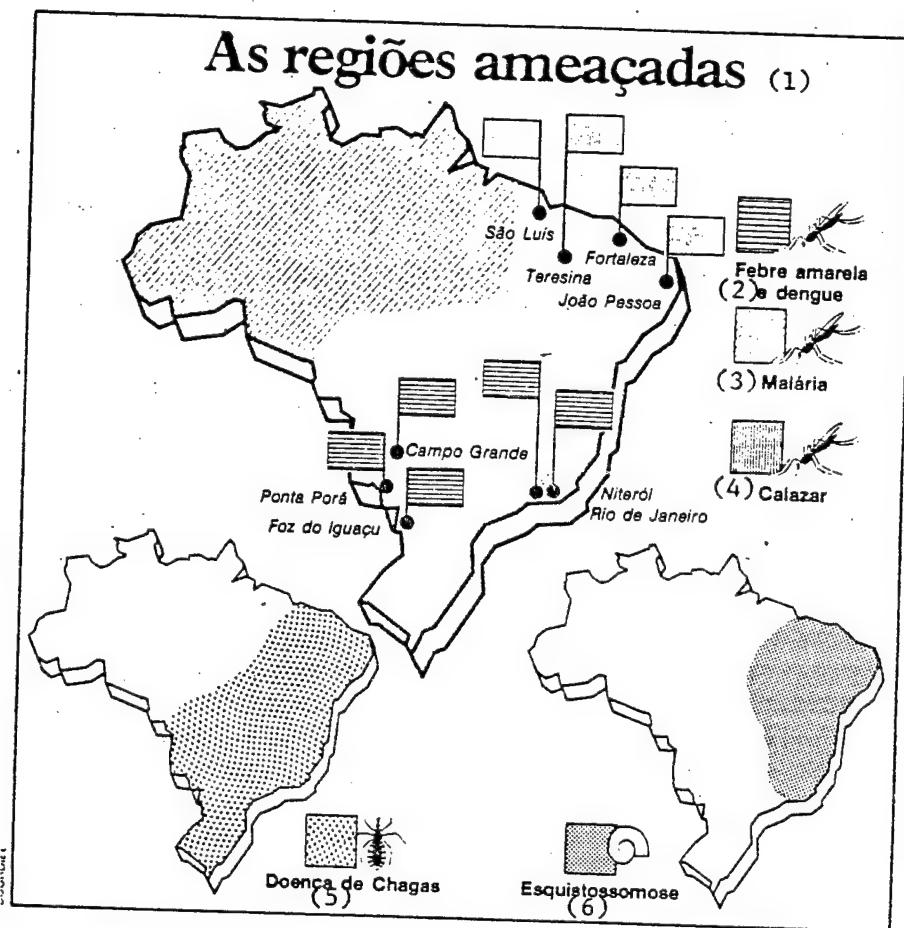
Hailed as one of SUCAM's most encouraging and successful initiatives, control of the primary carrier of Chagas disease, the "barber bug," or triatoma infestans, has been facilitated by the investment of ample funds since 1983, without which the endemic area from Maranhao to Rio Grande do Sul could not have received the necessary amount of the insecticide BHC to kill the pest. This year, 203 million cruzeiros will be allocated to continue the battle, which is being waged by 9,000 workers throughout the country, the only way to insure that the results will be lasting. The priority given to combating Chagas disease, which afflicts 10 million Brazilians, means that other public health dangers will not receive attention. The SUCAM budget for the year is 350 billion cruzeiros, inadequate for the Herculean task of controlling the other endemic

diseases in Brazil. This is the case with urban yellow fever and dengue, which not only threaten the city of Rio de Janeiro but also Nilopolis, Niteroi and Nova Iguacu, in Rio de Janeiro State, Foz do Iguacu, in Parana State, and Campo Grande and Ponta Pora, in Mato Grosso do Sul. Eradicated in 1955, the Aedes Aegypti mosquito was reintroduced in 1976, possibly by a ship arriving from Surinam.

With only two spray trucks, SUCAM is now concentrating its attack on critical areas in Rio. A survey conducted at the end of 1984 revealed that there was an extremely high concentration of the mosquito in such districts as Tijuca, Penha and Bangu. In some areas, 20 percent of the dwellings were infested with the Aedes Aegypti. The index of yellow fever contagion was 5 percent, and the contagion index was 1 percent for dengue. "It is very possible that we will have dengue in Rio," warns Marcos Boulos, aged 39, professor of infectious diseases of the University of Sao Paulo Faculty of Medicine. An explosive type of epidemic disease, capable of infecting thousands of people within a few days, dengue causes aching joints and muscles, accompanied by a high fever. In some cases it can cause hemorrhaging and death. "The problem with dengue is that there is no vaccine or treatment for it," complains Ronaldo Santos do Amaral, aged 39, director of SUCAM's Yellow Fever Division. "Fortunately, most of the cases are mild, although the individual will not be able to work." Even so, there is great fear that, any day now, the disease circle will close.

The threat of yellow fever is a more alarming prospect. With the abrupt onset of symptoms such as headache, a 40-degree fever, vomiting, jaundice and muscular soreness, in its more severe form the disease kills 5 percent of those infected by the virus. Today, the only effective means of combat are the same ones adopted by the eminent sanitarian Osvaldo Cruz, responsible for combating the yellow fever which invaded Rio de Janeiro in 1902, causing 984 deaths in that year and another 584 deaths the following year. Cruz combated the mosquito and called for obligatory vaccinations and quarantine of the patients, measures which were so repugnant to the public that they almost caused the fall of the Rodrigues Alves government. Osvaldo Cruz had 10,000 wardens for a population of slightly more than 800,000; today, SUCAM operates in Rio with only 700 men to attend to 5 million inhabitants. If the manpower is lacking, there is plenty of vaccine against yellow fever. Last year the Osvaldo Cruz Foundation increased its production from 8 million to 30 million doses per year.

Despite all these preparations, the authorities have made little effort to date to inform the most interested parties--the "Cariocas." Properly motivated, the residents of Rio could even help to eliminate the small places where water collects, such as bottles, tires and empty cans, in which the dreaded mosquito breeds. "If the public is alerted, [it is feared that] it could cause a decline in tourism and have negative repercussions on the economy," accuses Professor Marcos Boulos. As an example of this, he cites the campaign which SUCAM initiated in 1981, promoting vaccination against sylvan yellow fever, one of the forms of the disease, to prevent it from reaching the cities. It still persists in the northern and central western regions of the country and in Maranhao, with 45 cases recorded last year. It was to be a 4-year campaign, promoted on television, but the program was interrupted early on. "There was resistance from businesses and hotels in Manaus, with the argument that it would cause a reduction in the tourist trade," explains SUCAM superintendent Fiusa. In any event, he emphasizes, "the risk of these diseases is there, but it is limited."



**Key:**

1. Threatened regions	4. Kala-azar
2. Yellow fever and dengue	5. Chagas disease
3. Malaria	6. Schistosomiasis

More devastating and uncontrollable is malaria, with 342,000 new cases officially registered last year, 42 percent of which were in Rondonia and 33 percent in Para. Since the reporting system is faulty, the sanitarians estimate that up to 1 million people could be infected. Although 113 billion cruzeiros have been allocated this year to treat dwellings with DDT to eradicate the Anopheles mosquito, which transmits the disease, there are no prospects for the immediate control of malaria, particularly because the dwellings without walls, which are numerous in the Amazon Region, make it impossible to combat the mosquito. "In public health terms, malaria is the major challenge for the coming years," Fiusa says.

Another disease which is again causing concern for the sanitarians is visceral Leishmaniasis, or kala-azar. Under control since 1964, when there were systematic

campaigns against it, kala-azar reappeared in 1980, with 125 recorded cases, but this time, instead of being confined to the rural area, it has spread to the cities. "We are already seeing a kala-azar epidemic," warns Joao Batista Vieira, aged 38, director of SUCAM's Division of Endemic Foci. With 1,500 cases diagnosed last year, the disease is transmitted by the sand fly--*Lutzomyia longipalpis*--which lives on domesticated dogs. The symptoms of kala-azar are fever, wasting, loss of hair and swollen abdomen, and it can be fatal. This was also the risk faced by the 6 million to 7 million Brazilians who contracted schistosomiasis every year. However, with the Special Schistosomiasis Control Program, conducted throughout the entire endemic area from 1976 to 1979, through treatment of the disease, it has begun to be manifested in a milder form. Today, the system of health vigilance is being maintained to prevent a resurgence of the endemic disease.

A similar program in the south of the country with regard to the "barber bug," which transmits Chagas disease, is the pet project of Antonio Carlos Silveiro, aged 36, who has directed the SUCAM Chagas Disease Division for 8 years. "In this region, Chagas disease is no longer being transmitted by the 'barber bug,'" assured Silveira. The problem now is with another form of transmission. "Chagas disease is being introduced in the cities through blood transfusions," claims Joao Carlos Pinto Dias, aged 46, a research scientist at the Osvaldo Cruz Foundation. Dias concurs with the estimate that 20,000 new cases appear annually in the cities because of infected blood donations. "About 50 percent of the blood collection services do not screen their donors," Dias believes. "This is another important step in combating Chagas disease."

6362  
CSO: 5400/2032

BRAZIL

BRIEFS

LEISHMANIASIS INCIDENCE IN MANAUS--Belo Horizonte-Heitor Dourado, 45, professor of infectious and parasitic diseases at the Medical School of the University Foundation of Amazonas, said yesterday that the date on which vaccination will begin for American tegumental Leishmaniasis, a disease that is breaking out in epidemic proportions in the capital of Amazonas, depends on authorization from the ministry of Health. The professor, who is also general director of the Tropical Medicine Institute of Manaus, met yesterday with the group of researchers of the Biological Sciences Institute of the UFMG [Federal University of Minas Gerais] that developed the vaccine. The ministry has already granted provisional approval for its production. Dourado explained that the number of new cases of Leishmaniasis in Manaus rose from 614 in 1976 to 2,061 last year. According to him, during last January alone, 974 persons were identified as suffering from the ailment. Dourado recalled that the disease is becoming an urban phenomenon as a result of the migratory currents and deforestation, which drives out the sloths and opossums, hosts of the insect that transmits Leishmaniasis and that the animals then carry it to localities where it can bite humans. The professor indicated that the capital of Amazonas is today the major focal report of the disease in the nation. According to him, the first to be vaccinated will be the 20,000 residents of the Cidade Nova district. Researchers are of the opinion that use of the vaccine is viable: in previous tests performed on soldiers of the Amazonas Military Command, a 50 percent rate of immunization was achieved. However, use of the vaccine depends on the viability of its production from the economic standpoint and on authorization by the Federal Medical Council. [Text] [Sao Paulo FOLHA DE SAO PAULO in Portuguese 12 Feb 85 p 19] 8089

RARE DISEASE RESURGENCE--Ribeirao Preto--According to a report in official publications, within the last three months the Hospital of the Ribeirao Preto Clinics has recorded two cases of leucinosis, a disease last reported in Brazil in 1963. It is not only a rare disease, but also one that is difficult to diagnose and this is possible only with the use of sophisticated tests. One of the patients died last week and the other, Tatiana Matheus, a 9-month old baby girl, need a special milk imported from the United States for survival. The first case involved a 5-month old child, Wagner Ribeiro Dantas, whose parents reside in Araraquera on the Niagara plantation. According to the physicians at the clinic hospital, he showed serious physical and neurological symptoms common to all children who suffer from leucinosis, of genetic origin: the lack of an enzyme, resulting

in the accumulation of leucine, an amino acid that becomes toxic when present in excessive quantities in the organism and which is prejudicial to the development of the central nervous system. The patient's intake of amino acids (found in almost all foods, including mothers' milk) must be restricted to the absolute minimum possible. The industrial pharmacy of the clinic hospital has prepared a special diet and is now waiting for a new shipment of the MSUD powdered milk from the United States. Importation of the milk, which must continue for a year, will cost 10 million cruzeiros.  
[Text] [Sao Paulo O ESTADO DE SAO PAULO in Portuguese 8 Feb 85 p 13] 8089

CSO: 5400/2034

JPRS-TEP-85-007  
8 April 1985

BRUNEI

BRIEFS

MOSQUITO VIRUS KILLS TWO--Two children died in Brunei in January as a result of being stung by virus-carrying mosquitos. The virus has been classified as the Japanese B encephalitis. The disease, which is prevalent in Southeast Asia, causes brain inflammation. It was also disclosed that horses, monkeys, and some other smaller animals are also reservoirs of the virus. Health officials disclosed that children up to 12 years old are most prone to the virus.  
[Summary] [Kuala Belait THE BORNEO BULLETIN in English 9 Feb 85 p 1 BK]

CSO: 5400/4360

BURUNDI

EPIDEMIOLOGY COMPARISON STATISTICS REPORTED

Bujumbura LE RENOUVEAU DU BURUNDI in French 29 Nov 84 p 3

[Article: "Epidemiologic Situation in Kayanza Medical Sector"]

[Text] For the last few days, the Kayanza medical team has been organizing medical services, to be held every Wednesday and Thursday afternoons, for personnel assigned to Kayanza.

Wednesday, November 21, 1984, the Kayanza Hospital health assistant, Mr Jean-Marie Seingereka, discussed the epidemiologic situation in the Kayanza medical sector. In his review of terminology, he distinguished between an epidemic, which is a frequency of case occurrence of a disease clearly greater than that usually observed in a locality or region, and endemia, which is a disease chronically present in a region whose incidence is stable. In the case of an epidemic, obligatory reporting of certain diseases, such as cholera, plague and exanthemous typhus, to local health authorities is required.

During his general overview, Sonigereka presented participants with a 1984 epidemiologic bulletin for the Kayanza medical sector, especially for the Kayanza, Buraniro, Gitara, Matongo Muhanga, Jene, Gahombo and Gasenyi dispensaries.

For the period from January to December 1983, it was noted that among reported diseases, 3 caused a greater number of deaths: bacillary dysentary, 97 deaths; measles, 35 deaths; and tetanus, 3 deaths. If mortality and morbidity are taken into account, tetanus shows a high mortality rate (60 percent) compared to other reported diseases.

Three major concerns within the different health units were influenza (flu), with 9,911 reported cases and no deaths, bacillary dysentary with 4,191 total cases and 97 deaths and measles, a disease transmitted through the air, with 4,163 reported cases and 35 deaths.

Sinigereka mentioned that diarrheal diseases were a problem area, with the Kayanza polyclinic dispensary reporting many cases. He then presented a ranking by dispensary according to number of cases and deaths.

A comparison of 1983 and 1984 attests to the energetic battle that was waged against bacillary dysentary, as shown by a drop in reported figures.

Sinigereka also commented on certain diseases, such as tetanus, measles, pulmonary tuberculosis and yaws. He reminded his audience that tetanus is ubiquitous in the country and that even though the number of diagnosed cases is not great, this disease deserves special attention because it has a very high mortality rate, ranging from 30 to 60 percent. Measles immunization programs have begun to be extended to many medical sectors, but he indicated that an inspection of dispensaries was necessary to gather statistical data..

9825  
CSO: 5400/68

COLOMBIA

BRIEFS

SITUATION 'NORMAL' IN EL BAGRE--Medellin--The situation is back to normal in the area of El Bagre, the scene of violent incidents in which eight persons were killed, several injured, and three aircraft burned. Antioquia Governor Alberto Vasquez Restrepo has pledged to enforce the agreements that were signed to end the civil uprising during which peasants seized control of the town. He indicated that studies will begin soon to resolve the many problems that El Bagre residents are experiencing due to the absence of a town aqueduct, sanitation deficiencies, poor energy services, and lack of public works facilities. The governor reported that an elite medical team has been selected to give medical treatment to the peasants, who are plagued by yellow fever, gastroenteritis, and malnutrition. [Text] [Bogota Cadena Radial Super in Spanish 1730 GMT 3 Mar 85 PA]

CSO: 5400/2035

CONGO

BRIEFS

DIARRHEA PREVENTION--Of every 1,000 children born in developing countries, 200 die before 1 year of age, one hundred more before the age of 5 and only 500 survive to the age of 40. The WHO estimates that 5 million children under the age of 5 die every year from diarrhea. The causes of diarrhea, which is responsible for infantile morbidity and mortality, include poverty, malnutrition, a lack of appropriate information, an unhealthy environment and an inadequate health care infrastructure. Traditionally, the dehydration and weakness brought on by diarrhea have been treated by intravenous perfusion in medical centers and hospitals, not always accessible. Moreover, this relatively expensive treatment demands a high degree of professional competence. An even more effective therapy, oral rehydration, can be administered at home and is within the reach of everyone. A dextrose saline solution or a pre-packaged and ready-to-use capsule of oral rehydration solution can be given, at less cost. In the Congo People's Republic, the state and the party, concerned with the interests and rights of children, are taking active steps to safeguard the life of future builders of our society. Consequently, they have developed a national program to combat diarrheal diseases, under the direction of preventive medicine. One out-growth of this program, an intermediate training course for health agents, was offered in Brazzaville in 1982. [Text] [Brazzaville ETUMBA in French 19 Jan 85 p 7] 9825

CSO: 5400/68

DENMARK

35 CASES OF MENINGITIS REPORTED IN DECEMBER 1984

Copenhagen AKTUEL in Danish 16 Jan 85 p 3

[Text] "Some 35 cases of meningococci disease were reported in December 1984. This number was somewhat higher than usual for this time of year," according to the State Serological Institute. However, the cases were not of epidemic character, but were evenly distributed across the country.

Nevertheless, two of the cases were on the same handball team. First, a 14-year old boy became ill. The attending physician thought it was influenza but, when his condition worsened the next morning, he was admitted to the hospital, where they established that he had meningococci disease (physicians prefer this term to meningitis, cerebrospinal meningitis, which can be caused by other microbes than the meningococci).

The state medical officer made sure that the people who had been in contact with the boy were informed about the disease. It turned out to be a school class, a confirmation class and a handball team.

During the ensuing week, the handball team met twice. On Saturday, another boy became ill. That same evening, the attending physician again did not find sufficient cause to admit the boy to the hospital but, when his condition worsened the next day, he was admitted and the suspected meningococci disease was confirmed.

For safety's sake, members of the handball team were given a preventive treatment, and when it became clear that they were dealing with the same type (C) meningococci, the whole team was vaccinated. Parents and physicians in the area were told to be extra careful about signs of the disease. But no more children became ill, and the two boys are now improving nicely.

8952  
CSO: 5400/2520

DENMARK

GIRL DIES OF DIPHTHERIA IN COPENHAGEN AREA

Copenhagen AKTUELIT in Danish 24 Jan 85 p 3

[Text] An 8-year old girl from Copenhagen County is dead of diphtheria--a disease which has largely been eradicated in Denmark.

"The girl, who was admitted to Copenhagen County Hospital in Glostrup, died a week ago, but the diagnosis was first confirmed yesterday," said Board of Public Health director Michael von Magnus.

State medical officers in Copenhagen County, together with physicians at the hospital in Glostrup, have now begun to examine the 8-year old girl's schoolmates and other acquaintances to find out if the contagion has spread.

"We do not know where the girl came in contact with the disease. But there is no reason to fear an epidemic since the disease can only be transmitted by direct contact," said von Magnus.

Vaccination against diphtheria is part of the regular immunization program which practically all children in Denmark have to undergo.

The disease, which in the old days was called "genuine croup," manifests as infections and a thick coating in the throat and pharynx. If the disease is not treated, poisonous substances may develop which affect the heart and the nervous system.

"After having no diphtheria cases for many years in Denmark, we had a single isolated case 2 years ago, when a young man was diagnosed as having diphtheria. He was cured and there were no more cases at that time," said von Magnus.

8952  
CSO: 5400/2520

DENMARK

MINISTER URGES FUNDS TO START NATIONWIDE MEASLES VACCINATION

Copenhagen BERLINGSKE TIDENDE in Danish 20 Jan 85 p 3

[Article by Thorkild Dahl: "Free Vaccine to Protect Children Against Diseases"]

[Text] Denmark is the only country in Europe where children are not vaccinated against measles and mumps, and where expectant mothers are not vaccinated against German measles. Ten children die of measles and ten are born with deformities as a result of mothers contracting German measles.

The immunization of all children 15 months and 12 years of age will be expanded to include free vaccinations against measles and mumps, and expectant mothers will be vaccinated against German measles.

This is the urgent wish of the Minister of Interior, Britta Schall Holberg, (Liberal Party) for 1986, and she is now trying to find 21 million kroner in the ministry's budget to fund it.

"I am trying to find the money, and it is definitely my intention to succeed," said Holberg.

The government has set a fixed limit on each ministry's expenditures, and the vaccination program must therefore be financed through savings.

"These inoculations are important to the children, and also to the parents because there will be no illness of this kind later on. The free vaccinations will be a good thing and I feel it is necessary to do it," Britta Schall Holberg told BERLINGSKE SUNDAY.

WHO Recommends Inoculations

Denmark is the only country in Europe that does not have a comprehensive immunization program. The World Health Organization, WHO, recommends the inoculations.

"Only a few Danish children are vaccinated against these diseases. Only when the parents are very much aware of the problem and voluntarily take their

children to the doctor are they vaccinated against measles and mumps," said the minister.

"There can be some terrible deformities if the mother contracts German measles during the pregnancy. Many do not even know if they have had the disease, and practically no one is being vaccinated against German measles," said Holberg.

#### Preventive Measure

The free inoculations would be a new addition to the regular children's immunization program. The cost to the state is expected to be 21 million kroner in 1986, while for each of the ensuing years, the estimated cost is 14 million kroner, half of which will be paid by the State and the other half by local governments.

Board of Public Health statistics show that about 10 children die each year of measles, and a like number are born with severe deformities because the mother contracted German measles during the pregnancy.

The vaccinations would be a preventive measure, and the Board of Public Health feels it would take 20 years before the inoculations might pay for themselves economically.

8952  
CSO: 5400/2520

JPRS-TEP-85-007  
8 April 1985

ECUADOR

BRIEFS

MALARIA CASES REPORTED--Victor Reyes, director of the National Service for the Eradication of Malaria [Servicio Nacional de Eradicacion de la Malaria], recently reported that there had been 400 cases of malaria in Guayaquil during January and February. The USAID has provided a total of \$9.5 million in aid to combat the disease. [Summary] [Quito Voz de los Andes in Spanish 1230 GMT 24 Mar 85 PA] 4741

CSO: 5400/2039

ETHIOPIA

BRIEFS

IMMUNIZATION INTENSIFIED--The intensified phase of Extended Programme on Immunization (EPI) got underway here yesterday as scheduled in five kebeles of Higher 10. In kebele 01 of the same Higher about 200 mothers and children under two years of age were present to be innoculated. Vaccinations against tetanus, tuberculosis, whooping cough, depththeria, polio myelitis and measles were given. Each child was innoculated with the required number of vaccine. The number and type of vaccination varried in accordance with the age and previous vaccination record of the child. Comrade Dr. Gizaw Tsehai, member of the CC of WPE and Minister of Health, attended the first round intensified phase of EPI at kebele 01 and did the vaccination one of the children. Also present on the occasion were Comrade Shemelis Adugna, member of the CC of WPE and Commissioner of the National Children's Commission, members of the Addis Ababa WPE Committee, Chairman of the Higher as well as well as representatives of international organisations. The intensified phase of EPI is jointly organized by Addis Ababa Regional Health Department and the Addis Ababa City Council. It is expected that 150,000 children and mothers in the capital will be innoculated in the phase, and the undertaking will be completed in six months time. The present phase is believed to help raise the current critical EPI coverage of the city from 25 per cent to 100 per cent. [Text] [Addis Ababa THE ETHIOPIAN HERALD in English 14 Feb 85 p 1]

CSO: 5400/92

GHANA

MEASLES EPIDEMIC CLAIMS MANY LIVES

Accra PEOPLE'S DAILY GRAPHIC in English 18 Feb 85 p 8

[Article by Joe Okyere]

[Text] MORE than 100 children have died while an unspecified number have been attacked by an epidemic believed to be measles which has hit Breman Kuntanase and Odoben and their surrounding villages in the Central Region since last month.

Investigations conducted by the "Graphic" last Friday in the two towns revealed that the rate of infection is so alarming that it is feared if the Ministry of Health does not step in quickly to organise an immunisation programme more children would be affected.

The "Graphic" learnt that one family alone has lost four children since the outbreak of the epidemic.

Nan Appiagyei II, chief of Breman Kuntanase and Benkumhene of the Breman Traditional Area, has appealed to the Ministry of Health to Station Community Health Nurses in all rural areas with fairly large population to enable the people to benefit fully from the Primary Health Care (PHC) programme.

He further suggested the establishment of community drug stores to be operated in a way similar to the People's Shops in areas which do not have clinics or health posts.

When the Medical Assistant in-charge of the Odoben Health Post, Mr. E. T. Okutu, was contacted about the outbreak of the epidemic in the area, he said the health post had treated 169 cases from January up to date.

The Medical Assistant said his outfit had organised a mass immunization programme in the area and had so far immunized over 400 children against the epidemic.

Explaining the causes of the high mortality rate, Mr Okutu said lack of transport to go around the affected areas is hampering the smooth operation of the immunization team while the health post does not have the facility to store some of the vaccines used in the exercise.

CSO: 5400/90

GREECE

BRIEFS

INCIDENCE OF AIDS--Five cases of AIDS were diagnosed in Greece up to December of last year. Those were two Africans, one American and two Greeks. Not a single case was detected among drug addicts. These data were published in a bimonthly medical magazine, the "METERIA MEDICA GRECA" (Number 4, Volume 12), by Doctor G. Papaevangelou on the occasion of the symposium on AIDS in Greece. Doctor Papaevangelou notes that: "Information was first given by the mass media and in special articles and comments in the daily press (I KATHIMERINI of 4.9.83)." In the article it is pointed out that constant contacts through trips into endemic areas or through visiting tourists and African workers who are being hired in our country are bound to increase the number of cases, as has happened also in other European countries. Finally, the use of blood derivatives of commercial origin also has a further potential of leading to the spread of the disease in Greece. In the above-mentioned article in the "METERIA MEDICA GRECA" data had also been collected about research efforts in Greece, as in the first AIDS case diagnosed in a 24 year-old man of the black race, from Rabia, probably homosexual, and on the methods of detecting the antiviral factor. [Text] [Athens I KATHIMERINI in Greek 3-4 Mar 85 p 6] 12278

CSO: 5400/2528

GUINEA

BRIEFS

ANTI-MEASLES VACCINATION--A health care team has rushed to the aid of rural populations in the Missira sub-prefecture, 22 kilometers west of Koubia, where cases of measles have been reported. A preliminary investigation of the still unconfirmed cases has revealed that most of those stricken by the epidemic failed to show up at last June's vaccination sessions. The failure of entire villages to participate in this vaccination campaign has invariably been blamed on family heads, considered irresponsible. The prefecture has taken the necessary emergency measures by dispatching the director of Prevention Services, Doctor Alpha Amadou Diallo, to the site where he immediately began treatment in the Koundieya, Sarekindya and Missira-Center districts. [Text] [Conakry HOROYA in French 18 Dec 84 p 4] 9825

CSO: 5400/80

GUYANA

PUBLIC HEALTH VETERINARY UNIT'S PLANS DISCUSSED

Georgetown GUYANA CHRONICLE in English 28 Jan 85 p 5

[Article by Vanessa Cort]

[Text] Recently a two-man team from the Ministry of Health took a trip to the mining town of Linden to examine the operations of the local abattoir.

The visit followed reports reaching Georgetown of Poor levels of hygiene at the slaughter house in the town.

One of the two persons in the team was Dr Clifford Daniels, Head of the Veterinary Public Health Unit of the Ministry of Health.

The other was Dr. George London, head of the Epidemiology Department. Dr. Daniels, who took over the Unit in September last, told the Chronicle in an interview of the Unit's plans to step up its food hygiene campaign.

"The number of cases of food poisoning over the last year has been alarming," commented Dr. Daniels.

The Unit is responsible for among other things, the prevention and control of zoonitic' diseases (transmitted from animals to man) and food protection, which involves ensuring the provision of wholesome food to the public.

Veterinary public health is a relatively new concept in Guyana, and its area overlaps that of public health,

However, as Dr Daniels, explained, personnel in the veterinary public health field are trained to get to the source of animal originated diseases in food rather than simply identifying contamination.

Dr Daniels Unit works in concert with agencies which include the Mayor and City Council, the Public Health Department and the Analyst Department, in visiting restaurants, butcher stalls other places where food is handled.

Their joint task is to examine the conditions under which food is stored, prepared and served. They check the state of the food itself.

"What people must understand," stressed Dr. Daniels, "is that veterinary public health plays an important role in the nation's achievements and has a vital place in preventive medicine."

The head of the Unit announced plans for the training of technical personnel in the year ahead. Activities are to include seminars, symposia and lectures throughout the country.

In addition a community education programme is to be launched in collaboration with the Health Education Division of the Ministry of Health.

Visits to restaurants and other places where food is consumed will be intensified and carried out in conjunction with the Mayor and the City Council and other concerned agencies.

The main objective, Dr. Daniels explained, is to raise significantly the standard and quality of food offered to the public.

The Unit will also monitor closely the activities of food handlers and carry out checks to ensure that they are cleared medically.

With all its plans, the Veterinary Public Health Unit has a busy year ahead.

CSO: 5440/040

GUYANA

BRIEFS

TYPHOID OUTBREAK--Georgetown, 28 Feb--Guyana's Ministry of Health today confirmed an outbreak of typhoid fever here, but the chief medical officer, Dr Edgar London, said there is no need for panic. Dr London said one of the most likely causes of the outbreak is the proliferation of broken water mains, which cause the water to become contaminated. He mentioned no deaths from the infectious disease, but said: There have been 60 reported cases so far for this year--41 more than for the whole of last year. Dr London added: Precautions must be taken by all persons and water must be boiled before use, in addition to which when bleach is available, one teaspoon should be added to five gallons of water to kill the bacteria. [Text] [Bridgetown CANA in English 1539 GMT 28 Feb 85]

FILARIA CLINICS--Continuing its filaria programme, mounted last year with visits to homes, the Ministry of Health has announced the commencement of filaria clinics. The clinics will be held every Wednesday evening from 20:00 hrs at the Vector Control Division of the Ministry of Health. Results can be obtained the next day. Last year, the Vector Control Division carried out an intensive programme of filaria testing throughout the city. Members of the Division visited homes in the late evening taking blood samples. It was explained at the time that the visits could not be made any earlier in the day because the filaria organism only shows up in the blood late in the evening. The programme was mounted by the Health Ministry after it was observed that the incidence of filariasis was on the increase. [Text] [Georgetown GUYANA CHRONICLE in English 15 Jan 85 p 8]

CSO: 5440/040

HONG KONG

FIRST LOCAL AIDS VICTIM DIAGNOSED; MORE ANTICIPATED

Former U.S. Resident

Hong Kong HONGKONG STANDARD in English 5 Feb 85 p 1

[Article by Adam Kelliher]

[Text]

**HONGKONG'S first case of Acquired Immune Deficiency Syndrome (AIDS) was reported yesterday. He is a 46-year-old Chinese seaman who is in a critical condition and has only weeks to live.**

The Deputy Director of the Medical and Health Department, Dr S.H. Lee, at an impromptu press conference, said the patient had lived in Miami in the United States for 16 years before he returned to Hongkong last June.

In September, the man checked into hospital suffering from abdominal pains, bleeding in the stomach and weight loss. Blood samples, sent to the United States for tests in December, detected a deficiency of cellular immunity and the patient's case was diagnosed as AIDS.

"He most likely contracted the virus outside Hongkong as he spent so many years outside the territory. We have taken all precautionary measures and the patient is isolated in a single room," Lee said.

He would not divulge specifics about the patient's relatives, the hospital he is in, or how he contracted the disease.

Lee would not confirm the patient's nationality but inferred that he was a local Chinese.

He said this was not the same seaman who was rumoured to have undergone treatment for AIDS in Queen Mary Hospital last September. That patient is still in hospital.

Medical authorities said they had suspected that the confirmed victim had AIDS since September and that there was no tardiness in its detection.

A consultant for the Medical and Health Department, Dr Y.T. Chan, who has been dealing directly with the case, said: "After we detected significant symptoms we sent some blood samples for tests that are only available in the US.

"We did a clinical diagnosis and local laboratory tests, but for AIDS there is no specific test. So we sent blood samples for further supplementary tests and diagnosis."

A physician has been selected by the AIDS Advisory Committee to go to Atlanta, Georgia, this month to visit the special clinic investigating AIDS, and to bring back first-hand knowledge to Hongkong of the medical anomaly.

Lee said that this could be the first confirmed case in Asia, although the failure of medical authorities in neighbouring countries to report other incidents had made an overall picture difficult to obtain.

In August 1984 there were 5,563 reported cases worldwide, with most of these in the US, Europe, Canada, Britain and Australia.

Lee would not say if the patient had been cooperating with them by telling the medical authorities of any other possible victims infected since his arrival in Hongkong.

Lee said: "He (the patient) might say something but we do not know if this is the true answer."

The deputy director said he was confident that Hongkong had adequate medical facilities to deal with any further cases and that the disease, by its nature, could not affect the general population.

"Hongkong is a popular tourist area and does have many people passing through. However, because Hongkong is not as liberal in its laws as other territories we are in a better position to deal with the disease."

"We are very fortunate as we do not have a very large homosexual population here. But they are a group that is very difficult to identify."

Lee could not qualify this and, when asked if it might be possible that due to the heavy penalties against homosexuality in Hongkong, the disease might go "underground".

Lee said: "The government is making great efforts to improve general health education."

## Doctors' Assessment

Hong Kong SOUTH CHINA MORNING POST in English 5 Feb 85 p 10

[Article by Chiu Kit-Ying]

[Text1

Medical experts yesterday warned of the likely presence of more AIDS virus carriers in Hongkong.

The detection of the first suspected case of the killer disease in the territory has sent shock waves through the homosexual community.

And doctors said there might be other AIDS cases in Hongkong which have gone unreported because of the absence of screening tests to detect the infection.

They called for the immediate setting up of such tests among "high-risk" groups — including homosexuals and drug addicts.

One homosexual said the Government and the medical authorities should face up to the possible seriousness of the problem.

A pathologist at the University of Hongkong said there was always a probability that AIDS would be transmitted to Hongkong, considering the high mobility of people here and the territory's large number of visitors.

He suggested that the Government Laboratory should carry out screening tests — systematically checking drug addicts and other high-risk groups to get a better idea of the local situation.

To make a diagnosis of AIDS, he said, there should be tests on antibodies to the virus which develops the disease.

This would have to be coupled with

a test to confirm the presence of the virus protein in the blood.

However, he said there are not the facilities to carry out the tests in Hongkong at present.

Dr Norman Mulvey was critical of the Government's "slow attitude" in setting up screening tests.

"I suspect he (the seaman) is only one of a number of cases. This is just the first case they know of," he said.

He said there may be other victims who have been infected but have not yet shown symptoms.

He suggested setting up a clinic to carry out blood tests on homosexuals and other high-risk groups.

"Given the amount of tourists in Hongkong, naturally there are some who come here with AIDS. They will transmit the disease by way of sexual contact, or contact with drug addicts," he said.

"There is no way it (AIDS) couldn't be here. It is impossible that it is not," he said.

Dr Mulvey suggested that charitable and medical organisations start working on a vaccine for AIDS. Moreover, the Government should send money and medical experts to take part in overseas research work on the disease.

Dr Albert Cheung, a biochemist, said, in theory, many of the several hundred haemophiliacs in Hongkong have been infected with the AIDS virus and are carriers.

He said haemophiliacs have to be

injected with a blood product called Factor VIII, which is a key component for blood coagulation. The clotting factor is mainly imported from the United States and made from the plasma of thousands of donors, he said.

It is possible that some of the blood donors are homosexuals who are AIDS virus carriers.

He said that medical staff in Hongkong have not received training on AIDS treatment, because the disease has only been discovered recently.

They may be open to risk of infection in handling AIDS cases by coming in contact with patients' saliva, blood or body excretions.

He also criticised the Government for delaying the setting up of the screening tests.

The director of the blood transfusion service of the Red Cross, Dr Susan Leong, said she would like to have a representative to sit as an observer on an advisory committee on AIDS set up by the Government.

This is to keep the Red Cross informed with the latest developments on AIDS and to co-operate with the Government.

She said the Red Cross will step up its vigilance to ensure that potential donors are physically fit to give blood.

She said she would contact the Government to get details about the case which has just come to light.

CSO: 5440/044

INDIA

PAPER GIVES STATISTICS ON MENINGITIS IN DELHI

New Delhi PATRIOT in English 16 Feb 85 p 3

[Text]

The incidence of meningococal meningitis in the Capital has declined this month as compared to January.

While Delhi's hospitals admitted 240 cases last month. Out of these 49 died. The tally for the first fortnight of February is 85 and nine respectively.

The majority of the afflicted are children and the cases are spread throughout the city. The disease affects the 5-25 age group.

The breakup of the January cases for the seven major hospitals of Delhi are (deaths in bracket): AIIMS, 26(3); Safdarjang, 42(8); Lohia, 21(3); Kalavati Saran, 3(1); LNJP, 87 (17), Hindu Rao, 39(13) and St. Stephen's, 22(4).

The figures for February's first fortnight: AIIMS, 4(0); Safdarjang, 16(2); Lohia, 14(0), Kalavati Saran 15(1); LNJP, 12(4); Hindu Rao, 6(0) and St. Stephen's, 18(2).

The germ is a normal visitor to the city in the winter and spring months but the visitation this time has been far more expensive. Comparable figures for the previous two seasons have been made available only by AIIMS and LNJP hospitals. In AIIMS, the cases admitted in November, December and January

were 14, 17 and 26, respectively. The comparable figures a year back were 10, 13 and 9, and for the 1982-83 season, 6, 7, and 12.

LNJP admitted 37, 60 and 87 cases in November, December and January, respectively. The comparable data for last winter was 44, 40 and 23.

While there is no vaccine available, common drugs like penicillin and sulpha are quite effective.

The symptoms are sudden onset of fever, intense headache, nausea and often vomiting, a stiff neck and, often, a small pink rash (pinhead size) on the skin as well. The important thing is to get to the doctor fast—mortality can be up to 50% without treatment. Don't worry about missing the symptoms—the doctors have been warned.

The disease caused an Opposition walkout in the Friday session of the Delhi Metropolitan Council. Their attempt to introduce a calling attention motion on the subject was rejected by the Chair. Afterwards, Executive Councillor (health) Bansi Lal Chauhan gave a hospital-wise breakup of the cases registered, to the house. He also mentioned that there had been 581 cases over five months last year, of whom 180 died.

CSO: 5450/0089

INDIA

INCIDENCE OF POLIO AMONG CHILDREN REPORTED

Calcutta THE STATESMAN in English 14 Feb 85 p 11

[Text] NEW DELHI, Feb. 13--In India some 750 children contract poliomyelitis each day and around 250,000 infants die each year of neonatal tetanus, reports UNI.

Hundreds of thousands of infants and children are afflicted by tuberculosis, causing death in many cases. Whooping cough ravages the respiratory systems of hundreds of thousands and diphtheria kills a large number and leaves many debilitated.

An expanded programme on immunization was launched in 1978. There are six diseases on the official schedule for progressive nationwide immunization: tuberculosis, poliomyelitis, whooping cough, diphtheria, tetanus and typhoid.

The figures indicate that current immunization coverage is relatively low. Although there are variations among types of vaccination, overall only about one-fourth of the eligible population of children is at present immunized under EPI.

Immunization is expected to gain momentum in the Seventh Plan. There is reason to believe that the aim of universal immunization by the end of the present decade can be achieved, according to Mr David Haxton, regional director of the United Nations Children's Fund, here.

EPI is administered by the State Governments through the Union Department of Health and Family Welfare. The Ministry sets targets and controls the supply of vaccine from national centres of production and through imports.

The operational targets circulated to the State health authorities are based on performance in previous years and on the availability of the infrastructure for delivery of the immunization services.

Against an eligible child population of 20.9 million, the target set for diphtheria was 14 million in 1982-83. Actual achievement in that period was 8.3 million, about 59% of the operational target of 38.2% of the eligible population.

The target for poliomyelitis in 1982-83 was 5 million, the actual achievement was 74.5% of the target or 17.7% of the eligible population.

The corresponding figures for bacillus calmette guerin were 88.3% and 18.8% respectively.

CSO: 5450/0088

INDIA

BRIEFS

MALARIA IN CALCUTTA--The highest number of malaria cases in the city have been reported from south Calcutta, according to a health official of Calcutta Municipal Corporation. The official said a recent survey carried out by the corporation showed that the worst affected areas were Bhowanipore, Tollygunge and Rashbehari Avenue. A number of cases were also reported from the Jadavpur area, he added. Official figures show that there has been a gradual increase in the number of cases of malaria over the years. At least 19,961 cases were reported last year against 6,785 cases in 1982. Dr S. Chowdhury, chief health officer of the corporation said that in order to check the outbreak of malaria in the city, the corporation had decided to purchase equipment worth Rs 2.5 lakhs. This includes 10 van fog generating machines and 100 Copper Knap sacks to spray anti-larvae chemical. [Text] [Calcutta THE TELEGRAPH in English 27 Feb 85 p 2]

JAUNDICE IN SURAT--Surat, Feb 26 (PTI)--Eleven persons have died and 330 taken ill following the outbreak of gastroenteritis and jaundice in the city due to the contamination of drinking water over the past two months. The victims were mainly from Khatodara and Varachha Road areas of the city, according to civil sources. The sources said the water was contaminated by overflowing and leaking gutters in several areas of the city. At some places, drinking water and gutter water have got mixed causing serious health problems. Over 100 persons have been admitted to various municipal hospitals for treatment of water-borne diseases and over 230 were being treated as outdoor patients, hospital sources said. [Text] [Calcutta THE TELEGRAPH in English 27 Feb 85 p 7]

CSO: 5450/0092

INDONESIA

BRIEFS

DENGUE IN JAKARTA--Jakarta, 15 Feb (ANTARA)--DHF (dengue haemorrhagic fever) is still endemic in the Jakarta area, because every day a number of people suffering from the disease could be found at various places here, the head of the public relations office of the Jakarta administration, S. Sudarsin, said Wednesday. In January this year 107 people were affected by the disease, but none of them died. From 1 to 9 February, however, two of the 17 DHF-affected patients died. To deal with the disease the Jakarta administration has intensified abatement of the disease and destruction of mosquito nests. Sudarsin admitted that these steps did not eradicate the disease forever but had proven capable of preventing the disease from spreading to other places. [Text] [Jakarta ANTARA NEWS BULLETIN in English 15 Feb 85 p A2]

CSO: 5400/4357

IRELAND

## MINISTER OF HEALTH DISCOUNTS IMPACT OF HEALTH FUND CUTS

Dublin IRISH INDEPENDENT in English 27 Feb 85 p 9

[Text]

HEALTH Minister Barry Desmond last night denied a Fianna Fail allegation that the eight health boards were not able to provide an adequate level of health care this year.

In a bitter attack on health cuts Dr. Donal Ormonde had accused Mr. Desmond of introducing the "five-day sickness syndrome" into Irish hospitals.

Speaking during Private Members' time in the Dail on a Fianna Fail motion calling on the Government to provide the necessary funds to the health boards to make good the shortfall in their 1985 budgets, Dr. Ormonde said that this year the health boards would be short of £40 million to fulfil their needs.

"The average increase is only three per cent and with inflation at seven per cent that represents a reduction in real terms". Dr. Ormonde said.

Dr. Ormonde claimed the Minister wanted to dismantle the health boards and get all the health agencies under his direct control.

But Mr. Desmond argued that the Fianna Fail motion should be rejected for the following reasons.

Three health boards — the Midland, North-Eastern and North-Western, have agreed proposals for 1985 aimed at delivering satisfactory service within approved allocation levels. A fourth board — the South-Eastern — had made good progress in that regard and negotiations were currently taking place on the same subject

with the Southern Health Board.

There was also progress being made with the Eastern Health Board, Mr. Desmond said, and the Mid-Western Health Board would meet shortly to consider their chief executive officer's report on the 1985 budget.

Detailed discussions are being arranged with the Western Health Board after its failure last week to agree proposals forwarded by its chief executive officer.

In conclusion, Mr. Desmond said that all board members must realise that the resources he had allocated were all that were available to him and that no more would be forthcoming.

Opposition Health spokesman Dr. Rory O'Hanlon said that since the Government had come to office there had been an unprecedented reduction in health services.

The health boards said that they would overspend by £37 million this year, and if they were to reduce then patients would suffer he claimed.

"Lives will be put at risk," warned Dr. O'Hanlon, who added that if patients were forced to wait longer than was necessary, their general health would suffer.

— A health chief last night predicted a shift in emphasis in the traditional mix of health services. John Hynes, Chief Executive Officer in the Mid-Western Health Board said there would be a growth in community-based services, perhaps including areas which had been traditionally hospital-based.

ISRAEL

BRIEFS

NEW DYSENTERY STRAIN--Haifa--Staff of the Kupat Holim Klalit's regional laboratory here have diagnosed a previously unknown type of Shigella, a strain of bacteria that causes bacillary dysentery, the Histadrut's health fund's assistant spokesman reported yesterday. Dr Moshe Shmilovitz, the laboratory director, said identification of the new Shigella strain would enable patients suffering from the infection to be treated properly. Shigella was discovered by Japanese bacteriologist Kiyoshi Shiga in 1898. According to the spokesman, no new forms of dysentery have been detected in the past 26 years. The Klalit team, led by Shmilovitz, found the new type of Shigella during the investigation of a recent series of dysentery cases in the area. The new strain was found in 31 cases. The new type of Shigella was again diagnosed last spring as the cause of an outbreak of the disease in a nearby kibbutz. Results showed that the germ can cause dysentery epidemics. Details of the Israeli discovery have been published in an American medical journal. [Text] [Jerusalem THE JERUSALEM POST in English 28 Jan 85 p 3]

CSO: 5400/4506

KENYA

BRIEFS

MYSTERY ILLNESS IN MACHAKOS--A woman has died and several people have been hospitalised in critical condition at Machakos District hospital after a mysterious illness hit a squatters' camp near Athi River town on Sunday. Polluted river water was suspected to have caused the illness. Nairobi police headquarters reported yesterday that four of the affected people were rushed to the hospital last Sunday. One of them died while undergoing treatment and the rest were admitted in critical condition. [By Richard arap Kerror] [Text] [Nairobi THE KENYA TIMES in English 28 Feb 85 p 3]

CHOLERA DEATHS--Fourteen people have died of cholera in the last three weeks in Kisingati and Siu Islands of Fasa Division on Lamu District. Three others died in other divisions. This brings the total of cholera deaths this year in the district to 31. Last week a local official denied there was an outbreak of cholera in the area. [Summary] [Nairobi STANDARD in English 15 Mar 85 p 1 EA]

CSO: 5400/97

JPRS-TEP-85-007  
8 April 1985

MAURITIUS

BRIEFS

INFECTIOUS HEPATITIS REPORTED--Twenty-five cases of infectious hepatitis were recorded in different parts of the island during the week ending November 3. Eleven cases were identified in Flacq and seven in Port Louis. At the same time, a case of pulmonary tuberculosis was discovered in Pamplemousses, and two other cases of "schistosomiasis" in the Pamplemousses and Flacq districts. Moreover, there were 14 cases of infectious hepatitis during the week ending October 27. Only the Black River and southern districts were spared. Data for the two periods cited above, dating from November 13, were provided by the Ministry of Health yesterday. They cover infectious and contagious diseases; they do not include sexually transmitted diseases or malaria, which are treated in a special monthly publication. It must be kept in mind that only those cases reported to health authorities are included. It is therefore difficult, if not impossible, to know the extent of these infections. This is unfortunate because these diseases are easily contracted under the poor sanitary conditions which exist in a number of urban and rural areas. [Text] [Port Louis LE MAURICIEN in French 27 Nov 84 p 4] 9825

CSO: 5400/80

JPRS-TEP-85-007  
8 April 1985

MEXICO

BRIEFS

ANTIDENGUE MEASURES UNDERWAY--Health authorities implemented strict safety measures to protect the country's population against the insect that transmits dengue fever which inoculates its victims with the most dangerous variety of that disease: hemorrhagic fever. Victorico Ramos Grajales, the chief of the state's Coordinated Public Health Services, announced that physicians specializing in this field will come from the United States, Cuba, and Asia and will meet this Friday to brief health officials in the tropical regions of Mexico as to how to fight what could be an imminent epidemic. So far, outbreaks of dengue of the variety considered as being benign--since the symptoms are no more serious than those of a cold--have been registered along the coast of the Gulf of Mexico, as well as in Chiapas, Guerrero, and other areas with a hot and humid climate which promotes the insect's proliferation. The working session will be attended by health officials from Oaxaca, Guerrero, Tabasco, Puebla, Michoacan, Veracruz, Campeche, Yucatan, Quintana Ro, and Chiapas. According to Ramos Grajales, this is where the experts will chart the strategy to be pursued in coping with the epidemic outbreaks of hemorrhagic dengue. After that, the population will get an extensive briefing on how to protect itself.  
/Text/ /Mexico City EXCELSIOR in Spanish 11 Jan 85 p 8-D/ 5058

CSO: 5400/2029

MONTSERRAT

PLAN TO TREAT TOURISTS' HERPES STIRS POLITICAL ROW

Public Outcry, Party Reactions

Plymouth THE MONTSERRAT TIMES in English 18 Jan 85 p 10

[Excerpt] An angry public will force foreign-owned Manner Memorial Hospital to abandon its plan to treat North American herpes patients here.

People from all walks of life and political parties are committed to taking direct action, if necessary, to destroy the herpes plan or any other of its type.

Manner Memorial Hospital, a private institution, opened here in October, 1983, to treat patients brought from the developed countries for cancer, arthritis and multiple sclerosis.

Lack of Funds Caused Closure

Manner Memorial's Administrator, English-born Ann Della-Valle, confirmed in an exclusive interview with the Times that lack of funds and patients had brought down the curtain on the original programme.

She made it clear that the future of the facility depends on the availability of funds. "We need about US\$125,000," she said.

With the utmost frankness she declared: "Yes, we are considering treating herpes patients, and if we do treat herpes patients they will only be on island for a period of twenty four hours and this does not provide time for the contact by which the disease is transmitted."

In response to the reported public outcry, Miss Della-Valle said: "If the hospital has any hope of reopening I hope we will be entitled to inform, advise and share our intentions as we will also be prepared to listen to any concerns, fears or objections."

But public fury here has been fueled by television reports of stigma which herpes carries in the United States. Parents and teachers at some schools in the U.S. have been demonstrating against the presence of children infected

with herpes even though the Court ruled that they should be admitted if their bodies are completely covered and after medical examinations proved that they do not have lesions.

Mr. Conrad Samuel, a painter and Montserrat's leading caterer thinks "The proposal should be blocked at all costs."

A former member of the Caucus of the ruling People's Liberation Movement, Mr. Samuel declared: "We are a tourist island, we need to preserve our clean and unspoilt image and I am confident that our Government will not allow Manner Memorial Hospital to bring a single herpes patient here."

Manner Memorial has a licence to operate a private hospital.

A senior lawyer said: "I am prepared to carry the banner and lead the march if the Government leaves it to the people to block the plan."

The leader of the opposition Progressive Democratic Party, Mr. P. Austin Bramble, JP, thinks Government is as angry as he is by "this affront to the dignity of Montserrat and Montserratians."

"I am sure that Chief Minister Osborne and his fellow Ministers have already decided to move swiftly to safeguard us."

The adverse reaction to the herpes plan is not all printable.

The Medical Director of Manner Memorial Hospital, Dr. Ronnie Cooper, a Government Medical Officer is also under fire for his association with the institution "tainted with the herpes plan."

#### Editorial Comment

Plymouth THE MONTSERRAT TIMES in English 18 Jan 85 p 4

[Text] The angry public reaction to Manner Memorial Hospital's proposed entry into the herpes treatment business is understandable. Montserratians may not be the most educated people in the Third World, but television has brought home to them the terrible stigma which herpes carries in scientifically advanced America.

Since the vast majority of our tourists come from the United States, it is not exactly unlearned to conclude as Mr. Conrade Samuel has done that "herpes and tourism cannot be mixed." In addition to the adverse manner in which the herpes plan can affect our tourist industry, Montserratians think that their island should not become a centre for experimentation with the problematic contagious diseases of other countries.

Government probably erred in not limiting Manner Memorial Hospital's licence to the treatment of specific ailments, but the company retained an adviser who is a leading politician of the ruling party and that individual should be called upon to explain his position. Was he aware of the herpes plan?

If so, did he advise the company drop it and any other of its kind?

The gentleman in question would be the first to emphasize his great interest in the well being of Montserrat and the preservation of the island's good name. Could it be that the good people of Montserrat are getting another reminder of the perils which come to the fore when conflicting interests affect the judgement of politicians?

This newspaper has every right to blame Chief Minister John Osborne for many of the economic and political problems now facing the island. But let us be counted among those who firmly believe that Mr. Osborne, who does not drink red wine because it resembles blood, will oppose this herpes plan with all the power at his command.

Montserratians who were employed by Manner Memorial Hospital will endure hardship. We can only pray that that hardship will be temporary.

CSO 3298/418

MOZAMBIQUE

BRIEFS

NORWEGIAN HEALTH ASSISTANCE--Norway is to provide aid worth 14.5 million kroner, approximately \$1.6 million, to the program against tuberculosis in Mozambique, under the terms of an accord signed in Maputo today. The accord was signed by (Arthur Sidnev), resident representative of the Norwegian Agency for International Development, and Jose Francisco Rocha, national director of health. The amount will be spent over a 3-year period on medicines, equipment, and technical services. [Summary] [Maputo Domestic Service in Portuguese 1700 GMT 8 Mar 85 MB]

EEC PROVIDES TWO PROJECTS ASSISTANCE--Mozambique and the EEC signed two conventions in Maputo today connected with regional fight against tsetse fly and promotion of agriculture in Moamba District in Maputo. The conventions were signed by Mozambique's Finance Minister Rui Baltazar and EEC Delegate to Mozambique (Antonio Morogil). The Southern African Development Coordination Conference regional program for fight against tsetse fly will receive about \$1.6 million while the program for the promotion of agricultural activity, now in its second phase in Moamba, will receive \$8.3 million. The two conventions signed in Maputo today do not come within the framework of the Lome convention. The documents were signed based on bilateral cooperation in which the EEC is involved. [Text] [Maputo Domestic Service in Portuguese 1400 GMT 19 Mar 85 MB]

TWO DIE OF STRANGE FEVER--Maputo, Sunday--Two people have died and dozens have been admitted to hospital in Pemba, capital of the northern Mozambican province of Cabo Delgado, following an outbreak of a rare disease which has tentatively been identified as dengue fever. According to a Radio Mozambique, the disease broke out in mid December. The symptoms of the disease are high fever lasting for about four days, headaches and pains in the joints, eyes and lumbar region. Some victims of the disease have also suffered vomiting and diarrhoea. [Text] [Dar es Salaam DAILY NEWS in English 4 Feb 85 p 1]

CSO: 5400/91

NIGER

BRIEFS

ONCHOCERCIASIS MEASURES SHOW SUCCESS--According to the minister of Public Health and Social Affairs, onchocerciasis, and its equally fearsome cousin, trypanosomiasis, have always been a major concern for Niger's health care system. Preliminary vector control studies had previously shown where the principal breeding sites were located. One source was in four temporary streams in the savanna--the Sirba, the Goroubi, the Diamangou and the Tapoa--which flow from June to December and carry downstream a number of productive breeding sites: Garbey-Kourou on the Sirba, the Tapoa gorges, etc. This zone was characterized by intensive, seasonal, onchocerciasis transmission (1,000 to 2,500 bites per person each month). Another site, the Mekrou, which forms the border between Niger and Benin and is entirely enclosed within the W park, flows nearly all year. It previously harbored larval breeding sites productive right up until March. Results of the program in this zone after 10 years of treatment are striking. Transmission of the disease has been practically wiped out in 100 percent of the zone. The socio-economic effects are equally apparent. In Niger, the entire Say district is being voluntarily reoccupied and its valleys intensively cultivated. Although this region was abandoned primarily because of trypanosomiasis, Dr Abdu Moudi says, there is no doubt that the program to combat onchocerciasis has contributed to the return of these populations and to a resumption of the socio-economic development of the region. [Text] [Niamey LE SAHEL in French 4 Dec 84 p 2] 9825

CSO: 5400/68

NIGERIA

GOVERNMENT PROGRAM AIMS TO CONTROL TSETSE FLIES

Lagos DAILY TIMES in English 30 Jan 85 p 24

[Text] The Federal Government has carried out a feasibility study for the firm control of tse-tse flies which have infested an area covering 23 hectares at Iku-Ogen in Kwande Local Government area of Benue State.

Studies and engineering designs have also been completed for the development of river boards at Idah and Makurdi. The projects are estimated to cost ₦15 million and ₦26 million respectively.

The Head of State, Major-General Muhammadu Buhari made this known while replying to an address at a civic reception by the Benue State governor, Brigadier John Atom Kpera.

Major-General Buhari said that feasibility studies of the navigability of the River Benue have also been completed and work on the project would commence as soon as necessary funds are available.

He said that work on the Benue flood plains of Lokoja and Katsina-Ala has reached 40 percent and 90 percent completion levels respectively.

Major-General Buhari also said that feasibility studies were in progress to determine the possibility of developing hydro-electric potential sites at Makurdi and Katsina-Ala, adding that when completed, the projects would improve the navigability of River Benue and provide facilities for irrigation and water supply for the inhabitants of the area.

Similarly, he went on, the Federal Veterinary Control post in Makurdi was established for the control of animal diseases along strategic livestock routes in order to boost livestock production.

On communications, the head of state said, six out of 46 planned post office projects in the state have been completed at a cost of ₦2,280,000.

Earlier in his address of welcome, Brigadier Kpera lamented the system of zoning the state with other advanced states for the provision of Federal amenities.

The governor maintained that if the zoning system should be maintained, states should be grouped together according to their cultural and geographical affiliations.

He expressed dissatisfaction with the existing federal projects in the state and called for the establishment of more projects.

CSO: 5400/84

NIGERIA

BORNO STATE GOVERNOR: IMMUNIZATION PROGRAM NOT SUCCESSFUL

Kaduna NEW NIGERIAN in English 31 Jan 85 p 3

[Article by Abdullahi Idris]

[Text]

THE Expanded Programme on Immunization, started in 1979 and aimed at immunizing 80 per cent of children under two years against six communicable diseases by 1990, has achieved less than 25 per cent success half-way through. Governor Abubakar Waziri of Borno State has said.

Launching the programme in Maiduguri at the weekend, Governor Waziri said morbidity and mortality through these diseases which were to be reduced by 50 per cent at the end of the programme were still persisting at the previous high levels.

He said mortality through these diseases, range from 70 per 1,000 in urban to 150 per 1,000 in rural areas. Those lucky to survive these diseases, he said, ended up with such disabilities as blindness, paralysis, deafness and mental retardation.

The governor said the EPI programme was revised to overcome such daunting constraints of inadequate finance, supply logistics and managerial capabilities in order to achieve the objective by the target date of 1990.

Major-General Waziri announced that the state govern-

ment had approved 352,000 Naira for the epidemiological services this year, adding that the financial needs of the programme would continue to be taken into account in future annual estimates.

In terms of cost, he said, the EPI was highly feasible because the necessary vaccines required could be obtained for only a few kobo whereas an expenditure of several hundred Naira might be required in treating a single case of the diseases. The programme therefore commended itself as being simple, affordable and effective, he said.

The state Commissioner for Health, Mrs. Fati Ngare Zanna, said earlier that the federal government was committed to supplying 100 per cent of vaccine requirements while UNICEF would supply cold chain equipment, vehicles and train manpower needs.

She said UNICEF had so far supplied vehicles for vaccines distribution and that vaccines from the Federal Ministry of Health was now available for the take-off of the programme.

CSO: 5400/84

NIGERIA

BRIEFS

RABIES KILLS PEOPLE, ANIMALS--More than 2,000 dogs have been vaccinated against rabies in Kaduna since a campaign against the disease started last month, Dr Leo Nyam, the divisional veterinary officer, has said in Kaduna. Dr Nyam told the News Agency of Nigeria (NAN) that since the outbreak of the disease in January, six people, two cows and a sheep had become victims of rabies dog bites. He said that 15 dogs died during the period in Kaduna but there were no reported outbreaks in other parts of the state. The anti-rabies campaign, which will last till April, will also be extended to villages in the state, Dr Nyam said. [Text] [Enugu DAILY STAR in English 18 Feb 85 p 10]

MEASLES KILLS 35 PERSONS--About 35 persons died last month from measles in Shendam and Nasarawa Local Government areas of Plateau State, a senior health officer has announced. The officer, Alhaji Hamadan Aruwa, said that 16 villages in the areas were affected and that about 300 cases have been reported to the Epidemiological Division of the Ministry of Health. He said that effective control measures have been intensified by the ministry to check any possible spread to neighbouring villages. Employees of the Epidemiological Unit, he added, are now appealing to people in the rural areas to promptly report suspected cases of sickness among their families to the nearest medical centres. Alhaji Tanko Dagara and Mr J.R. Pam, chairmen and secretary respectively of the Plateau State Farmers Association, in an interview appealed to construction companies in the state to come to the aid of the state government in the maintenance of rural feeder roads. He attributed the increase in death rate in rural areas to lack of good roads, adding that if there were good feeder roads, rural farmers could easily transport sick people to the nearest health centres. The villagers explained that workers from the Epidemiological Unit of the Ministry of Health often encountered great difficulties in reaching remote villages whenever an outbreak of measles was reported due to bad roads. Some members of the public interviewed also called on owners of private hospitals and clinics to contribute to the campaign against measles by donating some drugs to the Ministry of Health to help augment what it has. [Text] [Lagos DAILY TIMES in English 9 Feb 85 p 2]

WHOOPING COUGH KILLS 55--Maiduguri--At least 55 children have died as a result of an outbreak of whooping cough in six villages in Gulumba District of Bama Local Government, one of the six zonal headquarters mapped out for the Expanded Programme on Immunization (EPI), in Borno State, it has been disclosed. The community's health supervisor of the EPI zonal office in Bama, Mr Musa Wazumtu, who said the six villages affected are Gulumba, Zangeri, Malamkari, Walasa, Kura, Jabbari and Malamri, urged people in the area to report to the nearest dispensary when they notice any outbreak of the disease. [By Ibrahim Musa Biu] [Text] [Kaduna THE DEMOCRAT WEEKLY in English 3 Feb 85 p 10]

CSO: 5400/84

NORWAY

STUDY FINDS TWELVE PERCENT OF HEMOPHILIAC MALES WITH AIDS VIRUS

Oslo AFTENPOSTEN in Norwegian 20 Feb 85 p 50

[Text] (NTB) [Norwegian Wire Service] A study of 115 Norwegian hemophiliacs undertaken by the Central Federal Hospital and Ulleval Hospital in Oslo shows that 12 percent have come in contact with the so-called HTLV-III-virus--probably through blood transfusions. It is this virus which in some cases can lead to the immune deficiency disease AIDS.

However, assistant chief physician Stig Froland in the department of medicine in the Central Federal Hospital stresses to NTB that the large majority of those infected with the virus do not get the disease.

A corresponding study of homosexual men in the Oslo area shows that seven percent are infected with the virus. This is approximately the same percentage as in Finland, whereas 10 percent of the Swedish homosexual men have been exposed to the virus.

"The study of the Norwegian hemophiliacs has actually yielded encouraging results. In Sweden, blood samples have shown that more than 80 percent of the hemophiliacs have been in contact with the virus. The corresponding figure for Denmark is 65-70 percent," says Froland.

So far, an 11-year old Swedish boy is the only Scandinavian hemophiliac who has contracted AIDS. In Norway, one hemophiliac contracted the disease pre-AIDS, which includes swelling of the lymph nodes. It seems that of those contracting pre-AIDS only 10-20 percent will develop AIDS. Six cases of AIDS have now been confirmed in this country. All are homosexual men. It can take up to five years from the time of infection to the development of the disease.

Currently, information is being sent out to all of the approximately 300 hemophiliacs in Norway offering them to have blood samples taken. Internal medicine specialist Stein A. Evensen in the Central Federal Hospital expects that within a short time there will be a complete survey of how many could have come in contact with the virus. For the time being, missing data include those for children.

"It cannot be excluded that a small number of Norwegian hemophiliacs who have been exposed to the AIDS virus will actually get the disease. Therefore, all hemophiliacs who have come in contact with the virus will be counseled regarding their life style and a follow-up by a psecialist. Blood samples from the sexual partners and parents will also be taken," says Stig Froland.

"Patients infected by HTLV-III-virus are very rarely carriers of the infection. This applies also to those who develop AIDS. There is therefore no reason whatsoever for people to be afraid of coming in contact with hemophiliacs," stresses Froland.

Hemophiliacs often require a large number of transfusions of certain blood products in the course of a year. Froland says that although anti-bodies against the HTLV-III-virus can be found in a hemophiliac, which indicates that he has been in contact with the virus, blood transfusions could also have acted as a sort of vaccination.

"The chance of being exposed to the virus in case of a normal blood transfusion is microscopic. Hemophiliacs are much more exposed than others, because in the course of one year they may need blood from 500 donors," Stig Froland points out.

A study of all Norwegian blood donors is now being planned.

In the nine months from the fall of 1980 to the summer of 1982 Norway imported American blood to supplement its own production of blood products for hemophiliacs. In addition, we imported some of it from Finland, but most of it we produced ourselves. The three last years we have been self-sufficient with regard to blood.

Specialist Stein A. Evensen tells NTB that it will be checked whether the Norwegian hemophiliacs who have been in contact with the HTLV-III-virus received blood transfusions containing foreign blood products.

The Swedish 11-year-old who contracted AIDS probably developed the disease after a blood transfusion with American products several years ago. These products are often prepared from the blood of thousands of blood donors. After the American import four years ago, eight cases of the liver disease hepatitis were detected in Norway.

The study of Norwegian hemophiliacs is carried out in cooperation between ward A of Internal Medicine and the Virology Section of the National Hospital, the Institute for Hemophiliacs and Chief Physician Jan Ulstrup at the Microbiology Section of Ulleval Hospital.

12831  
CSO: 5400/2524

PAKISTAN

INSTITUTE FOR CANCER PATIENTS SAID ALMOST READY

Islamabad THE MUSLIM in English 4 Feb 85 p 3

[Article by Saeed Qureshi]

[Text] Islamabad, Feb 3. The Nuclear Medicine for Oncology and Radiotherapy Institute (NORI), adjacent to the Islamabad Hospital Complex, is well known among the cancer patients all over the country. This is the 8th institute established by the Pakistan Atomic Energy Commission for exclusive treatment and diagnosis of cancer patients through radio isotopes. Although still under construction, the Institute has already treated some 6,000 patients since March 1983 when the Institute became functional under Dr N.A. Kizalbash, a reputed cancer specialist of Pakistan.

Dr Kizalbash has been supervising the Institute since 1976 when the blueprints of the project were drawn up for the first time. It was in 1978 that the construction work started and by December 1982 the Institute had taken a concrete shape.

Dr Kizalbash told THE MUSLIM that he had to surmount numerous difficulties at every step as the Government was keen that the Institute should become a model commensurate with the needs of the capital. Dr Kizalbash is familiar with each and every brick and the designing of the doors, tiles and plants in the Institute.

Originally estimated to cost Rs 60 million, including Rs 30 million for equipment imported from abroad, the Institute will need more funds for the remaining work now being completed at a fast pace. Dr Kizalbash is of the view that the institute will be fully operational by June 1986. By that time indoor facilities with 76 beds, an operation theatre, a lecture hall, a library, a pharmacy, housing colony for the staff and numerous other ancillary facilities will have been created. At the moment the Institute is not in a position to provide medicines.

The treatment at the Institute is free and no distinction is made between government and nongovernment patients. The outdoor treatment now available contains Gama Cancer Unit, Rectilinear Scanner, and Ranography System. One can vividly see the soft organs like kidney and liver on the sophisticated computerised machines. Unlike the commonly used X-ray machines, the X-ray scanners used at the Institute take hardly a minute to show up a picture of the malady of malignancy.

With 80 staff members, including five specialists, Dr Kizalbash is doing a kind of service which is certainly unique in the country. Besides NORI, PAEC has established similar institutes at Lahore, Karachi, Larkana, Peshawar, Hyderabad and Multan.

When asked, Dr Kizalbash said he had no difficulty in procuring funds and he specially talked of the interest shown by the PAEC chairman, Munir Ahmed Kahn, in removing all the bottlenecks in realising the project within the shortest possible time.

Dr Kizalbash said thyroid, a throat malady, and breast cancer were common diseases in the local area of Rawalpindi and Islamabad. He was not sure how many patients of cancer have been successfully treated so far. To another question, he said, although the number of patients was growing with the passage of time, the Institute had adequate facilities to cater to a much larger number of patients.

Much of the imported equipment is awaiting the arrival of foreign experts to be installed. The Institute needs more land. Its request for 10 acres of land was met with only 6 acres and that is why it was squeezed to accommodate all the facilities.

The formats of the stationery forms and the methods of maintaining records of the patients have been borrowed from France and other countries.

CSO: 5400/4705

PEOPLE'S REPUBLIC OF CHINA

POLIO, MEASLES DECLINE SHARPLY IN BEIJING

OW240834 Beijing XINHUA in English 0826 GMT 24 Feb 85

[Text] Beijing, February 24 (Xinhua) -- The number of cases of polio and measles in Beijing fell dramatically last year, according to the epidemic prevention department of the municipal public health bureau.

Only three cases of polio were recorded in the city last year, a drop of nearly 77 percent in the incidence rate compared with 1983, and there were 842 cases of measles -- an 80 percent drop.

Measles used to be one of the worst and most common child diseases in the city before a vaccine was discovered and widely applied in the 1960s.

Dai Ke, deputy director of the department, attributed the decline of the diseases to the ten million injections of vaccine and oral polio vaccinations given to children below the age of 15 last year.

There were also far fewer cases of other epidemic diseases like meningitis and whooping cough. Diphtheria had almost disappeared, he said.

8385  
CSO: 5400/4128

PEOPLE'S REPUBLIC OF CHINA

LI DESHENG URGES ATTENTION TO ENDEMIC DISEASE

OWI50107 Beijing XINHUA Domestic Service in Chinese 1322 GMT 12 Mar 85

[Text] Chengdu, 12 Mar (XINHUA) -- After hearing a work report by Vice Governor Liu Chunfu of Sichuan on the prevention and treatment of endemic disease on 10 March in Chengdu, Li Desheng, member of the Political Bureau of the CPC Central Committee and head of the Central Leading Group for Prevention and Treatment of Local Endemic Disease said: It is the objective of all Communist Party members and cadres to pay attention to people's health, be concerned about their well-being, and work for their benefit.

Li Desheng said: Cadres at all levels should think about the health of the people. The work of preventing and curing endemic disease must be subordinated to and serve the party's general tasks and objectives. We must do a good job and create a new situation in the work of preventing and curing endemic disease under the guidance of the party's general tasks and objectives.

Li Desheng stressed: Party committees and governments at all levels must pay close attention to and strengthen the leadership over the prevention and treatment of endemic disease. Departments concerned must coordinate efforts to jointly tackle disease.

The office of the Leading Group for Prevention and Treatment of Endemic Disease must conduct in-depth investigation and familiarize itself with the situation in order to offer good advice. At the same time, we must combine the prevention and treatment of endemic disease with the work of helping local people eliminate poverty and prosper. After production is increased and the people's livelihood improved, the incidence of disease can be reduced and patients rehabilitated.

On how to do a good job in the prevention and treatment of endemic disease, Li Desheng said: All localities must adopt measures in accordance with the actual situation in each locality. We must grasp typical cases by visiting areas stricken by disease and calling on patients to understand the situation, we must show concern for them in order to draw experience from typical cases in promoting overall work and training cadres. We must achieve progress in the work so that leaders at various levels will attach even greater importance to and show more concern for the prevention and treatment of endemic disease.

CSO: 5400/4130

PEOPLE'S REPUBLIC OF CHINA

MOLECULAR EPIDEMIOLOGY OF ROTAVIRUSES DESCRIBED

Beijing ZHONGHUA WEISHENGWUXUE HE MIANYIXUE ZAZHI [CHINESE JOURNAL OF MICROBIOLOGY AND IMMUNOLOGY] in Chinese No 6, Dec 84 pp355-357

[Article by Dai Guozhen [2071 0948 3791], Ren Liping [0117 7787 5493] and Sun Maosheng [1327 5399 4141], et al., all of the Institute of Medical Biology, Chinese Academy of Medical Sciences, Kunming: "Molecular Epidemiology of Human Rotaviruses in Kunming from 1979 to 1981 As Determined by Electrophoresis of Genome RNA"]

[Summary] According to the electrophoretic pattern of RNA, rotaviruses obtained from different hospitalized patients in Kunming from 1979 to 1981 can be ascribed to either of two subgroups. The relative importance of each rotavirus subgroup as a cause of hospitalized children suffering from gastroenteritis was quite different in the years 1979-1980 and 1980-1981. Viruses of subgroup II were found in 97.5 percent of the patients in 1979-1980, but viruses of subgroup I were found to be the main etiological agent in 1980-1981.

Between 1979 and 1981, seven different electrophoretic types of rotavirus were observed in children with acute gastroenteritis. Among them, two electrophoretic types belonged to subgroup I, and five to subgroup II. The significance of the genetic diversity of the rotavirus genome is discussed.

9717  
CSO: 5400/4125

JPRS-TEP-85-007  
8 April 1985

PEOPLE'S REPUBLIC OF CHINA

HBV-DNA DETERMINED BY MOLECULAR HYBRIDIZATION

Beijing JIEFANGJUN YIXUE ZAZHI [MEDICAL JOURNAL OF CHINESE PEOPLE'S LIBERATION ARMY] in Chinese No 6, 20 Dec 84 pp 433-435

[Article by He Chao [0149 6389], Yang Shouchang [2799 1343 2490] and Liang Chisen [2733 3589 2773], et al., all of the First Medical College, Guangzhou: "Determination of HBV-DNA by Molecular Hybridization in Sera of 186 Chronic Asymptomatic HBsAg Carriers"]

[Summary]  $^{32}\text{P}$ -HBV-DNA was used as a probe to determine HBV-DNA by molecular hybridization in the sera of 186 chronic asymptomatic HBsAg carriers (ASC). The results of HBV-DNA determination correlated closely with those of the HBeAg/anti-HBe system. The viral DNA was detected in 51 (82.2 percent) of 62 HBeAg (+) cases, but only in 1 of 103 anti-HBe (+) cases. The prevalence of HBV-DNA was directly proportional to the P/N ratio of RIA for HBeAg. When the P/N was above 8.1, its detection rate was 95.0 percent; when P/N was below 5.0, it was only 12.5 percent. HBV-DNA determined by molecular hybridization was deemed to be a more direct proof of viral replication in ASC.

9717  
CSO: 5400/4124

PEOPLE'S REPUBLIC OF CHINA

VACCINIA VIRUS GENOME CLONED

Beijing ZHONGGUO YIXUE KEXUEYUAN XUEBAO [ACTA ACADEMIAE MEDICINAE SINICAE]  
in Chinese No 6, 15 Dec 84 p 397

[Article by Yang Xinke [2799 2450 4430], Hou Yunde [0186 0061 1795] and  
Hu Yuwen [5170 5940 2429], et al., all of the Institute of Virology, Beijing:  
"Genome Cloning of Vaccinia Virus 'Tiantan' Strain"]

[Summary] Vaccinia virus "Tiantan" strain (TT strain) has been widely used  
for vaccination on a large scale in China for many years. The isolated  
virus genome can be digested with Hind III into 16 fragments. Thirteen  
Hind III fragments of the virus genome (D-P) were cloned in E. coli using  
pAT153 as a vector. The enzyme fragment variation of this virus genome in  
comparison with those of other vaccinia virus strains reported in the  
literature is discussed.

9717  
CSO: 5400/4126

PEOPLE'S REPUBLIC OF CHINA

RADIOIMMUNOASSAY FOR HBsAg DETECTION STUDIED

Beijing JIEFANGJUN YIXUE ZAZHI [MEDICAL JOURNAL OF CHINESE PEOPLE'S LIBERATION ARMY] in Chinese No 6, 20 Dec 84 pp 423-426

[Article by Zhang Lian [4545 1670], Luo Kangxian [7482 2123 0341] and Lin Ruhong [2651 3067 3163], all of the First Affiliated Hospital, First Military Medical College, Guangzhou: "Preliminary Study of a Radioimmunoassay for Detection of HBsAg"]

[Summary] A solid-phase radioimmunoassay (RIA) method was developed for detection of HBsAg. Its reproducibility, sensitivity and specificity were evaluated, and these results were compared with those of the Abbott kit (AUSRIA).

Horse anti-HBs was used both for coating solid phase and iodination. Normal horse serum was applied to the labeled antiserum to prevent the non-specific reaction between different species of animal sera.

The cutoff was  $2.21 \times$  negative control value. The factor 2.21 was derived from the mean S/N value and its 3 SD of 553 normal sera, while the AUSRIA factor was 2.1. The lowest detectable amount of HBsAg by our RIA method was 4.1 ng/ml, while that by AUSRIA was 2.1 ng/ml, which was about two times more sensitive than our system.

The prevalence of HBsAg in the normal population detected by this RIA ranged from 12.9 to 17.7 percent, that in patients with acute viral hepatitis was 60.6 percent, and that in chronic viral hepatitis patients was 89.9 percent.

As hepatitis B virus infection is quite common in China, it is important and urgent that RIA be widely used to detect the HBsAg carrier in clinical diagnosis, selection of donors and epidemiological investigation.

PEOPLE'S REPUBLIC OF CHINA

VIRUS ANTIBODIES INVESTIGATED

Beijing JIEFANGJUN YIXUE ZAZHI [MEDICAL JOURNAL OF CHINESE PEOPLE'S LIBERATION ARMY] in Chinese No 6, 20 Dec 84 pp 427-429

[Article by Tian Xin [3944 6580], Wen Yuxin [3306 3768 2946] and Zhou Dengren [0719 4098 0086], et al., all of the Institute of Microbiology and Epidemiology, Academy of Military Medical Sciences, Beijing: "Investigation of Antibodies to Dengue, Japanese Encephalitis, West Nile and Chikungunya Viruses in Ya County and Lingshui County, Hainan Island"]

[Summary] Sera collected from healthy inhabitants of Ya County and Lingshui County, Hainan Island, in 1982, where an epidemic of dengue 3 infection had occurred in 1980, were tested by the single radial hemolysis test for antibodies to dengue types 1, 2, 3, (D<sub>1</sub>, D<sub>2</sub>, D<sub>3</sub>), Japanese B encephalitis (JE), West Nile (WN) and Chikungunya (Chik) viruses. In the dengue epidemic areas, the prevalence rates of antibodies to D<sub>3</sub>, D<sub>2</sub> and D<sub>1</sub>, and JE viruses were 27 percent, 15 percent and 3 percent respectively in sera from individuals of 2 years or older. Among 177 serum samples from infants born in 1981, 12 had antibodies to D<sub>3</sub> and/or D<sub>1</sub> viruses. No serologic evidence of D<sub>2</sub>, WN or Chik virus infection was found. In 333 serum samples collected from persons in the nonepidemic area, none of the six antibodies mentioned above was detected. The prevalence rate of antibodies to D<sub>3</sub> virus was higher in people under 19 years old than in those above 20 years of age, and was higher in adult women than in men. These results suggest that in addition to D<sub>3</sub> and JE viruses, the possible existence of infection of D<sub>1</sub> virus in these areas merits further study. It seems that the transmission of dengue virus was not interrupted after 1980. It is likely that the source of infection in the 1980 epidemic of dengue fever in these areas was of exotic origin.

PEOPLE'S REPUBLIC OF CHINA

BRIEFS

MALARIA IN SOUTHERN CHINA--The incidence of Malaria has fallen to less than one in 10,000 in 30 southern Chinese counties recently surveyed. Medical institutions in Henan, Guangdong and Guizhou provinces have investigated the movements and life-cycle of Chinese anopheles, a native malaria-carrying mosquito. This enables them to map out the information needed to forecast and prevent the disease. The low incidence of the disease is also due to progress in the fields of epidemiology, biology and immunology. [Text] [Beijing CHINA DAILY in English 7 Mar 85 p 5 HK]

CSO: 5400/4129

JPRS-TEP-85-007  
8 April 1985

PHILIPPINES

BRIEFS

SHARP INCREASE IN TUBERCULOSIS--The number of Filipinos afflicted with tuberculosis has increased sharply in the past 12 months as a result of worsening economic conditions, spreading want and hunger, and abrupt price increases of prime commodities and medicines to prohibitive levels, according to reports gathered at the luncheon meeting to the officials and volunteer workers of the Philippine Tuberculosis Society at Makati Sports Club Wednesday, 20 February. The ratio of TB patients rose to an alarming figure of 70 persons out of 1,000 according to the latest statistics of the Tuberculosis Society. [Excerpt] [Quezon City ANG PAHAYAGANG MALAYA in English 25 Feb 85 p 6]

CSO: 5400/4358

PORUGAL

INCREASE IN TB CASES CAUSES CONCERN

Active Measures Needed

Lisbon DIARIO DE NOTICIAS in Portuguese 28 Jan 85 p 13

[Excerpt] According to a statement made by Dr Ramiro Avila during the 5th International Congress of Internal Medicine, tuberculosis in Portugal, which is now a matter of concern, will surely be reclassified as **epidemic** if the necessary measures are not taken to combat the disease.

The physician said that at present there is no anti-tuberculosis program nor are there any guidelines for fighting the disease, and he recalled that last year saw the dismantling of a unit organized to combat tuberculosis, namely, the anti-tuberculosis agency (SLAT).

Basing his report on a study made at the Pulido Valente Hospital, Ramiro de Avila stated that of 120 patients suffering from tuberculosis, 46 percent were between the ages of 1 and 30.

In the opinion of the physician, "This percentage of tuberculars in this age group is unacceptable in any developed country, where the disease usually occurs among the elderly." To deal with the situation, he advocated the creation of a network of units to detect the disease in its early stages and wide distribution of educational materials with regard to health.

Cases Double in Guarda

Lisbon SEMANARIO in Portuguese 26 Jan 85 p 24

[Text] The number of cases of tuberculosis detected in the Guarda district has more than doubled in only 4 years, a phenomenon that is beginning to concern the regional health agencies.

No final conclusion has as yet been reached as to the real causes of this increase of a disease that was thought to have been completely eradicated from Portugal, especially since, according to local health agencies, "This region is one of the least polluted areas in the country and is not one of those that have suffered from the crisis in terms of the increase in the number of hunger cases detected in the large urban and industrial centers."

In 1978, 73 cases of tuberculosis were detected in the district. This figure rose to 89 in 1980, to 137 in 1982 and to 183 last year. These increases appeared despite the redoubled control efforts of the Anti-Tuberculosis Agencies of Guarda, which, in 1984 alone, held almost 11,000 consultations in the district dispensary.

For many years there was a sanitarium in Guarda, founded by Queen Amelia, but it is now closed.

8089  
CSO: 5400/2522

PORUGAL

BRIEFS

OUTBREAK OF MEASLES PREDICTED--An outbreak of measles involving more cases than is usual for this time of year is about to occur in the Lisbon area. In the last few days, a large number of children between the ages of 1 and 5 have entered the Santa Maria and D. Estefania Hospitals. As a matter of fact, more than 300 children showing various symptoms are under observation in the Santa Maria Hospital and the situation is the same in the pediatric clinic of the D. Estefania Hospital, where the number of children with symptoms of measles showed a perceptible increase over the weekend. It should be emphasized that measles is a viral disease that usually breaks out at this time of year. One of the doctors contacted by DIARIO DE NOTICIAS said: "It is still too early to speak of an epidemic, since everything depends on the future development of the situation." [Excerpt] [Lisbon DIARIO DE NOTICIAS in Portuguese 28 Jan 85 p 13] 8089

CSO: 5400/2522

POLAND

TUBERCULOSIS INCIDENCE ON RISE

Warsaw DZIENNIK LUDOWY in Polish 19 Dec 84 p 3

[Interview with Dr Ireneusz Szyszko, of the Department of Epidemiology of the Tuberculosis Institute in Warsaw, by Hanna Rynkowska: "Fresh Air Will Not Suffice"]

[Text] [Question] Doctor, it has been said until recently that tuberculosis had ceased to be a threat to society; however, the statistics concerning its incidence contradict this. Are we again being threatened by an invasion of this disease, which is so horrible in its effects?

[Answer] It hasn't gotten that bad yet, although according to the latest statistics reported by the Department of Epidemiology and the Organization for the War Against Tuberculosis, in 1983 23,411 new cases were recorded; for a similar period in 1982 there were only 200 more than that. Thus you see the incidence of tuberculosis is not decreasing.

Among the newly recorded patients are as many as 3110 persons in whom the tubercular infection has begun again. In the group of first-time patients the number of men is the largest at 15,500; at the same time the number of women suffering is "only" 7000. We may note a similar difference between city and rural areas, such that the advantage lies with the country, where about 10,000 new cases have been reported; in the city, the number is greater than 13,000. This parallels the situation in past years.

[Question] What is the incidence of tuberculosis among children? Is it perhaps possible to hope that the incidence of the disease among children is low or even negligible, for children are required to undergo periodic examinations and to be inoculated with the tuberculosis vaccine?

[Answer] Unfortunately, in 1983 there were 485 cases of tuberculosis reported among children under 14 years of age and 809 cases among children 15 to 19 years old.

[Question] That may be considered a high rate or a low rate, for it is usually said that in civilized conditions 0.5-1.0 percent of the population may actually be suffering from active tuberculosis.

[Answer] I think that this is a high rate of infection in this day and age when, especially among children, there should not be any infection at all.

[Question] Doctor, what are the sources of tuberculosis infection?

[Answer] The most frequent source of infection is the patient, usually one with open tubercular lesions of the lungs. Upon coughing, this patient may spread large numbers of tubercle bacilli. Similarly, for latent tuberculosis, in the course of which it is not always possible to identify tubercle bacilli in the sputum, the possibility of the infection of those in close contact with the patient arises. This sort of infection comprises 95-98 percent of all cases.

The source of infection can also be animals, most often bovine tuberculosis from cows whose milk is infected with bacteria. Fortunately, in our country we have succeeded in almost completely eradicating bovine tuberculosis.

[Question] The incidence of tuberculosis is more or less the same in the country and in the city. Is it the case that fresh air has not sufficed to prevent rural inhabitants from contracting the disease?

[Answer] Tuberculosis was for a long time considered a disease which was mainly restricted to inner city squalor. The rural poor were protected from the illness just by fresh air and by the natural conditions of life, which were beneficial to health. Such convictions and the lower level of interest in the health of rural inhabitants connected with them ensured that rural tuberculosis became a subject of interest only much later.

Today it is considered that rural tuberculosis is an indirect result of the rapidly spreading processes of urbanization, industrialization, development of transport, and of the social migration connected with them. There was another practice which played a part here, and that is the quite widely accepted practice of sending tuberculosis patients into rural areas where they could be treated in the fresh air.

It is also known that rural inhabitants have a lower degree of natural resistance to tuberculosis than urban inhabitants. Besides, it was observed long since that more than just the fact of living in the country or working on a farm is necessary to account for the spread of the disease. The incidence of tuberculosis in agricultural countries with a high level of agriculture and a high standard of living (Denmark, Holland, Sweden) has always been significantly lower than in countries which are agriculturally backwards.

What is also equally well known is the influence of certain other factors, for example: the accessibility to health services, the level of health care, the scope of activities affecting the active discovery of tuberculosis in patients suffering from a latent and symptomless form of the disease in the early stages of the infection.

[Question] Then where do the differences in the incidence rates for the rural inhabitants of several provinces come from?

[Answer] The highest infection rates appear in the southeastern and central provinces; the lowest in the provinces in the Wielkopolska, Western Pomerania, and Lubusz regions. These regions differ in the development of their cultural infrastructure, the standard of agriculture and of health care.

[Question] How is it possible to explain, in this case, the differences in the incidence of tuberculosis among the inhabitants of neighboring provinces with similar living conditions, social history, etc.?

[Answer] Tuberculosis among rural inhabitants is only rarely discovered in routine prophylactic X-ray exams; on the contrary, it is more often discovered during the course of examinations occasioned by some complaint and therefore is at a much later state of development. It is also the case that, during recent years, changes have often been recorded in the incidence of tuberculosis infection among rural inhabitants (at one time a rise, the next time a fall again), and also a reduction in the incidence of infections in the oldest segment of the population, which speaks for an increased effectiveness in the discovery of tuberculosis. And although there are not in general X-ray examinations available on a national scale, a fact which has a decided influence on the number of infections recorded, we still may not ignore the fact that since 1981 there has been a serious decrease in the number of X-ray examinations performed in rural areas.

[Question] So we must assume that if the diagnosis of tuberculosis has become more difficult in rural areas, then the treatment of the disease which is already in a more advanced stage is similarly more difficult.

[Answer] Of course. In the country more often than in the city, acute forms of tuberculosis appear; there is a significantly higher mortality rate as a result of this disease. My judgment is that this results from an unsatisfactory level of diagnosis and treatment of the sick. A significant and growing percentage of rural tuberculosis patients points to the need for an increased role for basic health care. Physicians often forget about the existence of tuberculosis; as a result they very often reach diagnoses inconsistent with the facts, and diagnose a cough, for example, as a symptom of an ordinary cold.

The treatment of sick farmers who manage their entire farm without assistance is difficult when, for understandable reasons, they are not eager to stop for a long convalescence in a sanatorium or hospital far away from their land. Therefore, as I see it, the only way to improve the results of treating rural inhabitants is by the introduction of supervised treatment (for example, the distribution of medicine under the supervision of a nurse) in the nearest inpatient facility, that is, in a rural health clinic, and under the overall control of the Bureau of Tuberculosis and Pulmonary Diseases.

[Question] Doctor, we have been speaking for some time about the patient suffering from tuberculosis whose pathology has already been recorded. In your opinion, how many sick people are there who do not know about their disease or who already know about it and minimize it because they don't want to be treated?

[Answer] Unfortunately, I am not the only one who cannot answer that question, however much I might want to.

[Interviewer] Thank you for the interview.

12469  
CSO: 5400/15

POLAND

RECENT ADVANCES IN EPIDEMIOLOGICAL RESEARCH SUMMARIZED

Isolation of *Salmonella* Strains

Warsaw PRZEGLAD EPIDEMIOLOGICZNY in English No 3, 1984 pp 287-288

[Article by J. Pecone: "Characteristics of *Salmonella* Strains Present in Turtles in Poland and of the Exterotoxin Produced by Them: I. Of *Salmonella* strains isolated from turtles"]

[Text] Samples of faeces and cloacal swabs of 144 turtles found in Poland showed in 44 (30.5%) presence of *Salmonellae* belonging to 12 serological types. Besides the known serotypes new ones were found not yet known in Poland from the subgenus I, II and III. The sensitivity of the isolated strains was determined to chemotherapeutic agents used in the treatment of salmonelloses. They were studied also for their ability to produce enterotoxins. In this study the dermotoxic test was used, and its results were confirmed using selected strains for tests on suckling mice, cultures of Chinese hamster cells, and intestinal test.

Screening for *Lambliasis*

Warsaw PRZEGLAD EPIDEMIOLOGICZNY in English No 3, 1984 p 293

[Article by M. Lisowska and L. Milobedzka: "Epidemiology of *Lambliasis*; III. *Lambliasis* prevalence in the personnel of paediatric hospital departments"]

[Text] A screening coproscopic examination for *lambliasis* was carried out in 706 subjects working in paediatric departments of 12 hospitals in the Province of Poznan. *Lambliasis* was diagnosed in 2.7% of the studied subjects. Considerable differences were demonstrated between various occupational groups in the prevalence of *lambliasis*. Most cases were found in charwomen--4.4%, and in the age group 20-29 years this proportion was 16%. No cases were observed in physicians. Among nurses *lambliasis* was demonstrated in 2.9% and in other personnel of these paediatric departments in 3.1%. A particularly high prevalence was found only in charwomen aged 20-29 years, showing inadequate hygienic habits among these young women of short duration of work and a greater susceptibility of this group to invasion by *G. lamblia*.

### Environmental Health Survey

Warsaw PRZEGLAD EPIDEMIOLOGICZNY in English No 3, 1984 p 300

[Article by M. Krzyzanowski: "Self-Assessment of the Health State and Opinions on Environmental Harmful Factors in the Plock Population"]

[Text] An interview survey was performed among the residents of Plock, the town with a petrochemical plant, and in a control town, Kutno. Interviewers selected the respondents in the same manner in both towns and made the interview with long-term inhabitants of the towns, aged 40-55 years. Significantly higher prevalence of a number of symptoms was reported in Plock. They included irritation of eyes and throat, breathlessness, headaches and running nose. In Plock two times greater proportion of respondents assessed their health status as poor. Among the troublesome factors of living in the town only unpleasant smells were noted more frequently in Plock. The majority of the interviewed residents of Plock regarded the influence of the petrochemical plant on their life and health as unfavourable.

### Mortality Rates in Industrial Town

Warsaw PRZEGLAD EPIDEMIOLOGICZNY in English No 3, 1984 p 305

[Article by M. Krzyzanowski and M. Wysocki: "Analysis of the Mortality in Plock in 1981 and 1982"]

[Text] Using routinely collected data the mortality of inhabitants of Plock, the town with the petrochemical plant, was compared with the death rates of residents of all big towns in Poland (over 100,000 inhabitants). In the majority of diagnostic groups considered in the analysis the observed numbers of deaths did not exceed the expected numbers. The exception was a slightly greater mortality due to bronchitis, emphysema and asthma. It is difficult to attribute the above result to the environmental conditions in Plock, since the data on smoking habit as well as mortality rates in remaining respiratory diseases are not available.

### Trichinosis Outbreak in Radom Area

Warsaw PRZEGLAD EPIDEMIOLOGICZNY in English No 3, 1984 p 320

[Article by Z. Anusz, M. Urbanska, W. Plonka, M. Jedynska-Tamiolko and R. Jungiewicz: "Epidemic Outbreak of Trichinosis in Ilza, Province of Radom"]

[Text] In the years 1980-1983 the annual notified incidence of trichinosis ranged in Poland from 199 (1980) to 408 (1983). The general epidemiological situation of trichinosis is reviewed and an outbreak of trichinosis epidemic is described. Invasion was caused by ingestion of not examined pork obtained from pigs slaughtered in households. Pork was derived from 7 pigs kept in a dumping store for carcasses. The animals were fed food waste and meat from the carcasses of pigs, foxes and beaver-rats. The invasion by larvae of *T. spiralis* was quite heavy and the meat of these pigs was consumed by 156 persons

with incidence rate 24% (38 cases). Thirty of them were admitted to hospital and 8 were treated as outpatients. In 6 cases the course of the disease was moderately severe, in the remaining ones it was mild, there were no deaths.

Pig keeping in dumping stores of carcasses should be banned. The present hygienic state of these stores and their technical level should be regarded as highly unsatisfactory. The difficulties in the clinical diagnosis of trichinosis require that more attention should be given to this problem by first-contact doctors, including paediatricians.

#### Polio Vaccine Studies

Warsaw PRZEGLAD EPIDEMIOLOGICZNY in English No 3, 1984

[Article by Z. Jarzabek and M. Kantoch: "Neutralizing Antibodies in the Sera of Subjects After Intracutaneous Vaccination With Poliomyelitis Vaccine"]

[Text] Twelve pairs of sera were studied after taking them from 12 out of 24 subjects aged 18 years who had received incorrectly (intradermally) 1 dose of attenuated poliomyelitis vaccine. All these subjects had been vaccinated in childhood with monovalent vaccines against polio, with the exception of one subject for whom no mention about preventive vaccinations was found in the documentation. Besides that, 7 subjects had received inactivated Salk's vaccine type 1 and 2, and 3 subjects had been given attenuated polyvalent vaccine.

The titres of antibodies against these three types of polioviruses were determined by neutralization.

A significant rise of the titre of antibodies against type 1 and 2 was found respectively in 8 and 9 persons (rises in titre 7.04 and 5.47), while in 6 persons the titre of these antibodies against type 3 was raised (rise 3.88).

This observation correlates with the results of serological investigations indicating the lowest proportion of seropositive results against type 3, particularly in children aged 8-10 years and older.

Both these observations suggest the lowest immunogenicity of type 3 in the presently used in Poland attenuated vaccine against poliomyelitis.

CSO: 2020/90

SOUTH AFRICA

EPIDEMIC RISK IN CROSSROADS SAY OFFICIALS

Johannesburg RAND DAILY MAIL in English 21 Feb 85 p 2

[Text] Cape Town.--Worried health officials have warned of an outbreak of disease in the crowded Crossroads squatter complex if unrest continues to hamper the daily collection of latrine buckets.

Dr L Tibbit, Medical Officer of Health of the Divisional Council, warned yesterday that the situation could generate an outbreak of gastro-enteritis and spread measles.

He has withdrawn his health department staff from the unstable area--where at least 16 people have been killed in rioting--until it is safe for them to return.

Dr Tibbit added that an "unusually high" number of measles cases had already been reported to the Nyanga and Crossroads clinics. Last month, medical staff treated between 60 and 70 cases.

A huge inoculation campaign--involving 20 000 children--was necessary to combat the diseases, Dr Tibbit said.

"If we don't get in there soon it could become serious," he said.

"In November we inoculated 3 000 children, but there is such a tremendous turnover of population that numbers are increasing all the time."

He said that with the help of ancillary health services such as the Department of Health, inoculations could be done in a week.

Meanwhile, police described the situation in Crossroads yesterday as "very calm and peaceful", although once clearing up began, more bodies might be found to add to the present death toll of 16.

Talks between Mr Timo Bezuidenhoud, chief commissioner of the Department of Co-operation and Development, and squatter leaders seemed to have defused the situation.

The Crossroads Committee, under the chairmanship of Mr. Samuel Langa, had undertaken to try to restore peace and Mr. Bezuidenhoud had said no-one

would be moved from the camp unless the committee had been consulted.

--The strife-torn Crossroads squatter community is to be the subject of a special debate in Parliament next week, according to Rand Daily Mail Political Staff.

The debate was called for by the Progressive Federal Party following the worst outbreak of unrest in the Western Cape since 1976.

It will take place on Tuesday in the House of Assembly. Only white MPs will take part.

It is understood that the PFP will use the debate to try to extract an assurance from the Government that it will not move residents of the embattled squatter community to Khayelitsha against their will.

CSO: 5400/91

TRINIDAD AND TOBAGO

CHILDREN DIE AS GASTROENTERITIS SHOWS SHARP INCREASE

Report on Deaths

Port-of-Spain EXPRESS in English 13 Feb 85 p 3

[Excerpt] Two children have died in the wake of an outbreak of gastro-enteritis now plaguing the country.

According to doctors at the Port of Spain General Hospital and the Health and Environment Ministry the outbreak started a few weeks ago and has already claimed the lives of two children.

Ward 54, the ward for infant victims of the virus, was reported to be over-crowded up to yesterday.

One doctor attached to that ward claimed that the number of children seeking medical treatment for the virus was "alarming." Some 204 children have already been admitted and treated for the month of January compared with what the doctor called "a normal average of 120 admissions for the same period."

A Ministry release said the number of children needing treatment for gastro-enteritis increased sharply at the weekend and patients had been seen at the Oral Rehydration Unit which was set up for this purpose in 1981.

The doctor explained that every year around carnival time a virus known as Rota becomes active particularly because children are more exposed to crowds. He added that parents could assist in the speedy recovery of their children if they were given prompt medical treatment.

"In the cases of the children, who died it was because of delay in seeking medical attention," the doctor noted.

Oral Rehydration Units

Port-of-Spain TRINIDAD GUARDIAN in English 14 Feb 85 p 18

[Excerpts] An increasing number of children contracting gastro-enteritis in North Trinidad has forced the Ministry of Health and Environment to renew its appeal to the public to take precautions.

According to a release from the Ministry, the number of cases increased sharply over the last weekend and patients have been sent both to the Oral Re-hydration Unit and the wards. The increase in admissions reflects advanced stages of dehydration possibly because of delay in seeking early medical attention.

Oral dehydration units are established and operated at the Port-of-Spain and San Fernando General Hospitals. Treatment is also available at health centres throughout the country.

County Council's Concern

Port-of-Spain TRINIDAD GUARDIAN in English 20 Feb 85 p 11

[Text] San Fernando: Alderman Surujrattan Rambachan, chairman of St. Patrick County Council, said yesterday that the council was concerned about the sudden increase in the number of cases of gastro-enteritis in the county.

He pointed out that some 150 cases were reported over the past few months.

Alderman Rambachan said that from reports reaching the council, it is believed that lack of proper water supplies was contributing to the problem.

About seven springs in the county, he pointed out, were being used by residents who were not getting adequate supplies of water either from trucks or through taps. Those springs must be cleaned he said.

He said that the council would embark on a clean-up campaign shortly.

CSO: 5440/042

UNITED KINGDOM

NEW GOVERNMENT MEASURE WILL ALLOW HOSPITALS TO HOLD AIDS VICTIMS

Leeds YORKSHIRE POST in English 21 Feb 85 p 3

[Article by John Fisher]

[Excerpts] SPECIAL powers are being introduced to hold patients with the killer disease AIDS, in hospital if they are dangerously infectious.

But the Government will not make AIDS a notifiable disease for fear of discouraging sufferers from seeing their doctors.

The health minister, Mr. Kenneth Clarke, announced new moves against the disease yesterday but stressed that the special powers would only be needed in a small number of cases.

Mr. Clarke will lay regulations under the Public Health (Control of Disease) Act 1984 to allow health authorities to keep a patient in hospital when he is dangerously infectious.

Normally AIDS patients could be dealt with without putting them under any greater restraints than other patients, he said.

The powers might be needed for rare cases that might arise when a patient refused to co-operate or in some other special circumstances.

Measures to safeguard recipients of blood and blood products would be

tightened up and efforts to dissuade people in the AIDS high risk groups from donating blood are being increased.

Health authorities are being told not to release personal confirmation about AIDS sufferers without proper consent.

Mr. Clarke commented "AIDS has attracted much publicity and public concern. It is highly regrettable that in some instances confidential details of individuals suffering from the disease have been made public.

"This release of information does nothing to create a more informed view about the disease and does not help those affected."

The Government's Chief Medical Officer, Dr. Donald Acheson, would write to every doctor in the country to give advice on AIDS.

The moves were announced as Dr. Acheson gave a warning that the number of AIDS victims in Britain would rise fairly rapidly for the next three years. In 1988 there could be one or two thousand new cases.

CSO: 5440/046

---

UNITED KINGDOM

BRIEFS

DEATHS FROM AIDS--A CHURCH organist who gave blood to more than 40 people, including a two-year-old boy, died from Aids yesterday in the Royal National Hospital, Bournemouth. His death brings the known toll in Britain from the disease to 55. Forty-one people, mainly haemophiliacs, who received the clotting agent Factor Eight from blood donated by the organist, Mr Christopher Egner, 27, have been found to have Aids antibodies and are being monitored, but Wessex health authority says the risk of them contracting the disease is "absolutely minimal." Mr Egner, organist at St Swithun's parish church in Bournemouth, was said yesterday by the rector, the Rev. Dick Jones, to have borne his illness with "great courage." British Airways' director of medical services has issued a circular to staff warning of the dangers of Aids following unconfirmed reports that five stewards had died of the disease. A spokesman for the stewards' and stewardesses' association said the airline had organised staff meetings to discuss the disease. [Text] [London THE DAILY TELEGRAPH in English 23 Feb 85 p 36]

CSO: 5440/046

ZIMBABWE

CRACKDOWN ON RABIES, VACCINATIONS ENFORCED

Six People Attacked in Harare

Harare THE HERALD in English 9 Feb 85 p. 1

[Text] Six people have been attacked by rabid animals in Harare in the past six weeks and Government vets have warned that they will soon start prosecuting owners of dogs which have not been vaccinated.

Provincial veterinary officer Dr Gilbert Green told The Herald all the attacks were by animals which had not been vaccinated.

He added: "The vets are now using the full force of the law which provides that people with unvaccinated dogs will be fined up to \$100," The alternative penalty is three months' imprisonment.

All dogs have to be vaccinated, when three months old, one year old and every three years thereafter.

Five of the attacks took place in Hatfield, all within 500 m of each other. Another case was reported in Eastlea.

"In all cases the people have been treated and are safe," said Dr. Green.

Over-friendly

Two of the attacks involved a rabid cat in Homestead Road, Hatfield.

Mrs Rosemary Buchheit told The Herald that the cat bit her after it had attacked her three-year-old daughter, Hannah. The cat became over-friendly about three weeks after it had been spayed.

"I was in bed when I heard my baby crying outside. She had been bitten on the leg...I was convinced the cat was rabid, although it had been playing like a kitten the day before."

The cat bit her on the hand when she tried to catch it. "It was like a nightmare. It took some time to unlock the cat's jaws from my hand, even with five people helping," Mrs Buchheit said.

The cat later died of rabies. Everyone who had been in contact with it has been treated.

"I feel cats should have been vaccinated for rabies too. Cats get rabies like all animals," Mrs Buchheit said.

Dogs can be vaccinated free every Friday afternoon at the provincial veterinary services department at Borrowdale or at the SPCA every Wednesday.

#### Buhera Rabid Hyena Terror

Harare THE HERALD in English 13 Feb 85 p 3

[Text] Villagers in the Buhera communal lands are living in constant fear of an outbreak of rabies following attacks on people by both wild and domestic animals.

Last month five people were attacked by a hyena at Gudza village in the Nyashanu communal lands before it was killed by the villagers.

A four-year old girl later died from the hyena wounds at Murambinda Hospital and the other four were treated for rabies and discharged.

Veterinary officers who examined the hyena at Buhera confirmed that it had rabies.

A few days after the incident a dead hyena was found at Gamanya village in the Murambinda area with fresh wounds in the head. Villagers suspected that it could only have killed by another rabid hyena in a fight.

The peasants are now scared that the disease may have spread to their domestic pets.

Last week a cat viciously attacked Cde Diana Masara in the Mutsvera area. Cde Masara (20) had come to visit her parents from Kwekwe where she lives with her husband. She said the cat refused its usual evening meal before it attacked her. It bit her on the left hand, the left elbow and on the right leg below the knee. Cde Masara was treated at Murambinda hospital.

#### Public Education Campaign

Harare THE HERALD in English 21 Feb 85 p 5

[Text] The Department of Veterinary Services has launched a vaccination and public education campaign to contain the outbreak of rabies in Buhera district.

Rabies broke out last month when a rabid hyena attacked five people at Budza village, killing a four-year-old child.

A few days later a hyena was found at Mharadzano village--apparently killed by another rabid hyena in a fight. Mharadzano is within walking distance from Matsweru where a rabid domestic cat attacked a visitor. It was killed, and sent for examination to the Department of Veterinary Services.

A spokesman for the veterinary office in Buhera this week said the vaccination campaign had started in the areas where the disease had been reported.

The team was also visiting schools in the affected areas to explain the signs of rabid animals and what to do when someone is bitten.

CSO: 5400/90

ZIMBABWE

#### OUTBREAK OF MALARIA IN CHIREDZI

Bulawayo THE CHRONICLE in English 25 Feb 85 p 6

[Text] THE Ministry of Health is currently working hand in hand with the Mkwashine Estate's health department in Chiredzi District, to combat an outbreak of malaria on the estate.

There has also been a sharp increase of malaria cases at Malipati rural clinic in the same district because of the persistent wet weather conditions.

The field officer in the malaria control unit for Masvingo, Cde Prince Dhuri, said last week statistics obtained at Mkwashine Estate clinic on malaria were the highest at any clinic in the province.

In December last year, 180 people were treated for the disease while another 500 were treated in January.

For one week the malaria control unit put emphasis on educating the people on why they should take a weekly dosage of anti-malaria tablets and taught village supervisors on spraying techniques.

The field officer said he had requested that the Ministry of Information, Posts and Telecommunications' mobile cinema unit in Masvingo to show films on the prevention of malaria. The success of the exercise needed co-operation of all communities involved and by the end of this month statistics should show whether they were winning or losing the war.

A medical assistant at Malipati rural clinic, Cde Enias Shuro, said recently 50 percent of the Malipati area was affected by malaria. Although cases of cerebral malaria were very rare, at least one person died last year.

The work of the 18 village health workers in the area was being hampered by people who were not responding well to advice to take anti-malaria tablets every week, Cde Shuro said.

He also said that the clinic was receiving 10 sexually transmitted diseases (STD) cases a day and efforts to have people bring their partners with them were unsuccessful.

As a result, they had decided to impose a fee of 75 cents on anyone suffering from STD, in an effort to discourage prostitution in the area.

Meanwhile in Zaka, a district councillor for Jichidza Cde Elfas Mkanuri, has alleged that the Jichidza Mission clinic was chargng medcal fees to peasants and those who could not pay were turned away.

CSO: 5400/95

ZIMBABWE

BRIEFS

TSETSE FLY PLEA TO OAU--HARARE--The fight against the tsetse fly, which claims about 20 000 lives yearly in Africa, should be co-ordinated by the OAU. Zimbabwe's Minister of Agriculture, Senator Denis Norman, said this in Harare yesterday. Opening a seminar to find solutions to the problem, Senator Norman said the eradication of the insect would result in an increase of about R64bn worth of food in Africa. All OAU member countries should co-ordinate their efforts to this end. But he warned that over-use of chemicals could cause fresh problems. "This should only be taken as a temporary solution while better methods are being sought." Zimbabwe annually reports 12 deaths due to tsetse fly. [Text] [Johannesburg RAND DAILY MAIL in English 26 Feb 85 p 2]

CSO: 5400/95

AUSTRALIA

BRIEFS

ANTHRAX OUTBREAK IN GIPPSLAND—Officials from the Victorian Department of Agriculture believe they have traced the first of an outbreak of anthrax in Gippsland. They say two bulls died within 3 hours yesterday on the property of a cattle dealer at Leongatha, east of Melbourne. (?Officials) bulldozed the farm, where the first outbreak of the disease occurred on Thursday [7 March]. The South Gippsland regional veterinary officer, Dr (Peter Jackson), said departmental officers were checking the sale of livestock from the dealer. All cattle properties have been quarantined for at least a month, and other properties in the area are under surveillance. [Text] [Melbourne Overseas Service in English 0430 GMT 10 Mar 85 BK]

CSO: 5400/4362

JPRS-TEP-85-007  
8 April 1985

DENMARK

BRIEFS

AUJESCKYS DISEASE ATTACKS SWINE--A farmer in Nordals had to kill his entire livestock after it was attacked by a virulent swine disease. A total of 1,800 swine lost their lives when they were stricken with Aujesczky's disease. "This is the first incident of its kind here. Fortunately, however, it will not affect swine exports because Aujesczky's disease can also be found in countries that import our swine," district veterinarian Carl Anton Henriksen, Rodding told Ritzau. [Text] [Copenhagen AKTUEL in Danish 22 Jan 85 p 2]  
8952

CSO: 5400/2520

IRELAND

VETS, GOVERNMENT IN WRANGLE OVER THE ERADICATION PROGRAM

Vets' Boycott, Call for Probe

Dublin IRISH INDEPENDENT in English 16 Feb 85 pp 1, 2

[Article by P. J. Cunningham]

[Text]

VETS last night called for an immediate independent inquiry into the mismanagement of the £1 billion TB eradication programme, as they announced a boycott of the current test.

Rejecting the Department's £85.8 million new three-year plan, the Irish Veterinary Union (IVU) accused the Minister, Mr. Deasy, of spending taxpayers' money under false pretences in the present scheme.

Union president Denis Coffey blamed Mr. Deasy for "pulling the plug" on this year's cattle testing by locking vets out of the scheme.

And he alleged that the Minister was incompetent in his handling of the scheme, and claimed he had gone against some of his own department technical officials on the issue.

The present controversy between the vets and the Department stems from Mr. Deasy's insistence that his officials and not farmers would nominate vets to carry out tests in future.

The Minister said he was changing the old format in the 28-year-old eradication programme to improve its structure, and as an attempt to stamp out the disease in the national herd.

However, a defiant Mr.

Deasy last night pledged that the new round would begin on Monday with the Department directly nominating and paying vets to carry out the work.

The Minister said he was amazed that the vets' complete backtracking over the past few days, after they had admitted that both the Department and the union had made progress at recent meetings.

He emphasised that the rejection by vets was all the more incomprehensible because his scheme was based on their recommendations and those from other interested bodies.

As the IVU now prepares to ballot its members, Mr. Deasy warned that public money could not continue to be wasted on a scheme that was not producing results.

The Minister said he had a responsibility to his Government to make sure the job was done properly after they had made the capital available to him for disease eradication.

A boycott of the scheme by vets would not hit our huge cattle export in the short term. During the previous boycott, in the mid-seventies, farmers were able to sell cattle by having private tests carried out before selling.

However, the incidence

of TB doubled at that time because of the dispute. If the same was to happen now it would see the incidence increase from the present rate of 3 p.c. to 6 p.c., which would see the level of the disease at its highest for many years.

However, Mr. Coffey described the proposed plan as at best a containment scheme and totally bogged down in bureaucracy.

"For instance, for every

one cow tested a vet must sign his name eight times," he pointed out.

And the union's PRO, Paul Rafter, warned that present veterinary services would virtually disappear if there was not an inbuilt flexibility in the scheme to respond to calls from farmers.

The IVU—which represents the country's 900 practising vets—stressed that they were willing to continue testing under the old system or if there was a commitment to establish a committee of inquiry.

### Ongoing Dispute

Dublin IRISH INDEPENDENT in English 18 Feb 85 p 3

[Article by P. J. Cunningham]

[Text] AGRICULTURE Minister Austin Deasy is hoping to defy the vets' boycott of his £85.5 million TB eradication scheme with the help of young vets and practices outside the present testing programme.

But the Irish Veterinary Union (IVU) warned last night that it would not stand for any "blackleg tactics" from the Department.

The three-year plan is due to start today and the Minister is trying to get around the boycott by directly nominating and paying vets to do the work.

ITU general secretary Peter Dargan warned: "We will be policing this very carefully and there will be serious consequences for any break of ethics which sees one vet go into another's practice."

And he made it clear that if the Veterinary Officers Association—which represents Department vets—tries to take over his members' work the IVU would complain to Congress to sort out the matter.

The row between the vets and the Department stems from Mr. Deasy's insistence that his officials and not farmers would nominate vets to carry out tests in the future. He said he was changing the format of the 28-year-

old eradication programme in an effort to improve it and stamp out the disease.

Mr. Deasy said yesterday he was fed up with individually and to entice them to break ranks.

"Only 3.5 per cent. of the entire 1,600 vets in the country answered his letter, so it is impossible to see the Department doing the round on scab labour," he pointed out.

The union in a statement at the weekend blamed the Department's mismanagement of the TB eradication programme as the underlying reason for failure to stamp out the disease, and called on Mr. Deasy to set up an independent inquiry into the running of the scheme.

However, Mr. Deasy ruled out such a course of action, and said changes he was making were necessary to improve the workings of the TB eradication plan.

The Department is simply backtracking, IVU president Denis Coffey said in an RTE interview yesterday.

"There is no way that you can embark into a scheme that is going to spend £85 million if the thing is not going to work. I can't see why the Minister won't agree to a public inquiry. One has to wonder why he won't."

Vets won't be going out to test for TB today because the Minister would not allow them, Mr. Coffey claimed. "There won't be TB testing by vets because we won't get it to do".

Also on RTE, the Minister said he had come to the conclusion that he was too soft.

"The more ground I give them the more they want", he said. "Give them an inch and they want a yard".

He stressed the Minister had to be the main participant of the scheme, not just an interested spectator, and unfortunately that was what was wrong for far too long.

Mr. Deasy explained he had given considerable concessions to the union. He would have thought it would have agreed to operate the scheme long ago.

NIGERIA

EXPECTED INFLUX OF CATTLE MAY SPREAD DISEASE

Kano SUNDAY TRIUMPH in English 17 Feb 85 p 12

[Article by Boko Mohammed]

[Text]

EXPERT report on rinderpest situation just released in Yola says Nigeria, Gongola State particularly, will experience a large scale influx of cattle and other animals this year and blames this on scorching drought effects, suffered by the neighbouring countries.

And against the backdrop of the consequences of this situation, reports say the Gongola State Government is now considering urgent measures to check and limit the spread of various animal diseases in the state.

Already, the Ministry of Agriculture here and the Federal Livestock Department have agreed to be involved in two national and international programmes for eradication of rinder-

pest.

According to the rinderpest situation report, released by the state Ministry of Agriculture, this year the state recorded three outbreaks of rinderpest involving 827 cattle with 32 deaths.

The situation report points to epidemiological investigations as revealing that the sources of the present outbreaks originated from a neighbouring state.

The most recent outbreak at Mayo Belwa Local Government was reported to be the result of infected herd from Sokoto State migrating for dry season grazing.

According to the report the state government and

the Federal Livestock Department are operating in the affected areas while Nigurore cattle market has been temporarily closed to prevent the spread of the disease.

The Commissioner for Agriculture, Dr Umaru Ibrahim Toungo said that the state government has released the sum of ₦103,500 for campaign against animal diseases this year.

"Our strategy is to concentrate on the vaccination of calves and check the influx of cattle coming from Cameroun Republic and neighbouring states for dry season grazing. These constitute sources of danger for the spread of the diseases in the state", he said.

CSO: 5400/69

NIGERIA

FEDERAL GOVERNMENT GIVES ANTI-RINDERPEST EQUIPMENT TO KADUNA

Kano NEW NIGERIAN in English 21 Feb 85 p 11

[Article by Dupe Motojehi]

[Text]

THE Federal Military Government has provided various equipment worth thousands of Naira to Kaduna State to enhance its campaign programme on eradication of rinderpest.

The items include refrigerators, deep freezers, Coleman box for storage of vaccine, sterilizers, S. brand used for marking the body of the animals to facilitate identification and some diagnostic kits.

Federal Campaign Officers at the Federal Livestock Department in Kaduna, Dr. Olukayode Oluwole and Dr. Mukaila O. Sule told the New Nigerian that the items would be handed over to the state Ministry of Agriculture on behalf of the state government today. However, they said preparation towards the handing over was still in progress.

It was noted that the items were provided by the Federal Military Government following serious outbreaks of rinderpest in the country.

The cattle disease had led to a drastic depletion in population of livestock within the last few years and to avert the trend, federal and state governments embarked on rigorous campaign against its spread by inoculating cattle and monitoring their movements, especially across the borders.

The New Nigerian learnt that the most devastating outbreak of the disease occurred between 1981 and 1984.

Tracing the source of infection, it was also gathered that some animals brought in from the neighbouring countries were carriers of the diseases and before much efforts could be made to restrain the spread, thousands of heads of cattle had died in Sokoto, Bauchi, Gongola and Borno.

However, following an intensified campaign on its eradication thereafter, it was gathered that the disease had been contained, but to prevent its resurfacing the campaign would be sustained.

CSO: 5400/69

NIGERIA

BRIEFS

GONGOLA CATTLE VACCINATIONS--The Gongola State Commissioner for Agriculture, Dr Ibrahim Tuonungo, has said that more than three million head of cattle have been vaccinated against rinderpest in the state since January 1984. In a statement, the commissioner said that about 4.2 million doses of tissue cultured rinderpest vaccines had been purchased by the ministry and that the state government had released ₦103,500 for the campaign this year. Dr Tuonungo said that investigations revealed that the current outbreak originated from a neighbouring state. He also said that the state ministry of agriculture, in collaboration with the federal livestock department, would be involved in two programmes for eradication of rinderpest. [Text] [Kaduna NEW NIGERIAN in English 14 Feb 85 p 3]

CATTLE VACCINATED IN BENUE--A total of 213,811 herd of cattle was vaccinated in Benue last year, the state's Commissioner for Agriculture, Mr Amile Gyuve, has said in Makurdi. Addressing a seminar on rinderpest eradication, the commissioner said that there had been no records of an outbreak of the disease in the state since June last year. Mr Gyuve told the participants not to rest on the false assumption that rinderpest had been eradicated in the state and urged them to continue the fight against the disease. More than 50 divisional veterinary officers, zonal coordinators, health supervisors and innoculators from various parts of the state are participating in the workshop organised by the state's Ministry of Agriculture and Natural Resources. [Text] [Enugu DAILY STAR in English 21 Feb 85 p 4]

CSO: 5400/69

UGANDA

BRIEFS

SWINE FEVER HITS MBALE--Pig farmers in Mbale and Kapchorwa districts have lost hundreds of their stocks in recent weeks due to an outbreak of a dangerous killer disease. Farmers in the Buginyanya, Bulago and Kiguli areas of the two districts told The People that the killer disease which started in late December and has continued up to now, affects the pigs causing death in a matter of just two days. Officials of the Ministry of Animal Industry in Mbale named the disease as African Swine Fever, a virus disease peculiar to pigs. The officials confirmed that the disease does not affect human beings. In recent years the pig population in Mbale and Kapchorwa districts had grown considerably with peasants keeping two or three pigs in addition to other animals in the homes. With a shortage of grazing grounds, pigs have become a popular source of meat in substitution to cows because of their short maturation period. Pigs take only six months to mature as compared to six years for cows. The recent outbreak has led many farmers to slaughter most of their animals leading to a glut of pork on the markets. [By Dick Wanasolo] [Text] [Kampala THE PEOPLE in English 28 Jan 85 p 3]

CSO: 5400/69

BANGLADESH

PAPERS REPORT DAMAGE TO CROPS FROM PESTS

Report from Faridganj

Dhaka THE NEW NATION in English 21 Feb 85 p 2

[Text]

**FARIDGANJ (Chandpur).**  
Feb 19: Paddy and wheat crops on about 1500 acres of land are being damaged by attack of pests and rats to the miseries of farmers of the rural areas of Chandpur.

It has been learnt that a vast area under Boro and Pyjam paddy has been attacked by a kind of pest named 'Meo' at Safarmali, Lalpur, Purandapur, Char Nandalalpur, Char Prokash, Koralia, Dasadi and other neighbouring villages under Chandpur upazila.

In addition, rats have also been damaging the crops including paddy, wheat, potato and mustard in various fields.

Rats are reportedly causing

much harm to potato, mustard and wheat fields. A farmer of Chandpur who had dug a big rat hole in use of his land recovered over five seers of potatoes from there. Many such rat holes are being detected daily here and there.

Similar reports of pests and rats menace in respects of the winter crops are being received from villages of Faridganj-Haim, char, Hajiganj, Matlab and Shahrasti upazilas too. The farmers are at their wits end as to contain such extensive nuisance of pests and rats.

Despite contacting the relevant department, no worthwhile steps have so far been taken to arrest this crops damage, it is alleged.

Paddy, Potato, Wheat Damaged

Dhaka THE BANGLADESH OBSERVER in English 20 Feb 85 p 7

[Text]

**SATKHIRA** Feb 18:—Due to pest and rat attack over one thousand acres of cultivated crops are being damaged causing miseries to the farmers of Satkhira.

It has been learnt from the farmers that a vast area of Boro and Pyjam paddy has been attacked by a kind of pest named "Meo" for the last few days under Satkhira Upazila.

In addition to that, rats have also been damaging the crops like paddy, potato mustard plants and wheat in the field. It has been roughly estimated that over 1000 acres of crops are now under attack of pests and rats.

A farmer pointed out that in his potato field, he found to his surprise and sorrow a big hole of rat and on enquiry he recovered over 6 seers of potato from the rat hole. Many such holes of rats are being detected here and there of the above affected places. It is reported Rats are also causing harm to wheat and mustard fields for quite some time.

Farmers are very much worried about the said nuisance. They have alleged that despite contacting the relevant department, no steps have so far been taken to save the crops from damage.

JPRS-TEP-85-007  
8 April 1985

ISRAEL

BRIEFS

COTTON LEAF WORM PESTICIDE--A new and ecologically safe pesticide for the control of the Egyptian cotton-leaf worm (spodoptera) has been developed at the Hebrew University's Faculty of Agriculture in Rehovot. According to researchers, the pesticide uses a chemical attractant that brings the caterpillar to the poisoned bait which is not dangerous to birds or other animals that may later eat the caterpillar. Previously, it has been necessary to spray the entire cotton plant with poison, and the run-off from these poisons enters the soil, possibly contaminating water sources. The new pesticide has been tried in Israel and is believed to be an advance in cutting the estimated \$2.5 million spent on the control of this worm in Israeli cotton fields.  
[Text] [Jerusalem THE JERUSALEM POST in English 29 Jan 85 p 3]

CSO: 5400/4506

MALAYSIA

## LEAF HOPPER THREATENS RICE CROP

Kuala Lumpur NEW STRAITS TIMES in English 18 Feb 85 p 14

[Article by P. Parameswaran]

[Text] AN insect, hardly the size of a rice grain, is wreaking havoc on the lives of padi farmers in Malaysia's rice bowl.

It was partly responsible for the Sultan of Kedah ordering moderate-scale celebrations for his birthday last year. The Sultan was touched by the plight of the farmers who had been asked to skip planting for a season to prevent the insect from breeding.

The devastating effect of the insect was also a topic of discussion for the nation's leaders at a Cabinet meeting recently.

The pest is no other than the green leaf hopper -- carrier of the *penyakit merah* viral disease that has ravaged \$130 million worth of padi on 96,000 hectares in the Muda Agriculture Development Authority (Mada) area, covering Kedah and Perlis, since 1981.

The *penyakit merah* also attacks padi crops in all rice-producing countries in Southeast Asia but agricultural scientists say Malaysia is the worst affected.

The disease was found to occur in five-year cycles since it was detected in Krian, Perak, in 1933, but has now entrenched itself in the country's rice bowl where it takes a heavy toll on the basically subsistence farmers who toil in their small farms for their daily livelihood.

All year through, the green leaf hopper feeds continuously on padi plants or within three days it loses its infectiousness, explains a spokesman for the Malaysian Agriculture Research and Development Institute (Mardi).

"By feeding on the plants, it transmits the virus which stunts their growth and turns them into a yellowish and, later, rusty-red colour. The padi husks will be blackish and empty," he

says.

The smaller the plants, the more susceptible they are to the *penyakit merah*.

"If it is the seedlings which are attacked, then it is a 100 per cent loss," he says.

An entomologist warns that the green leaf hopper will be a permanent feature in Malaysia unless "something dramatic" occurs. No one doubts this. Even other scientists and the Government

speaks of the use of insecticides to control the green leaf hopper, training of extension staff to explain to the farmers the dangers of the disease and ways to keep the fields vector-free, publicity campaigns, devising a fixed planting schedule, planting varieties of padi resistant to *penyakit merah* ...

These were the massive efforts undertaken over the last couple of years to arrest the disease. But one thing is clear: success was achieved only to a certain extent, and partly due to some of the farmers themselves.

Last year, Mada decided that the best way to fight the disease was to kill the virus by drying up padi land. Farmers were not to plant padi from Oct 31 the previous year because Mada would stop the supply of water to the padi fields for a month from Jan 15.

The move to restrict water supply was agreed to by the farmers but

### 'Danced'

For one thing, enormous amounts of money have been poured into measures by the Agriculture Department to wipe out the vector but these efforts have succeeded only to the extent of reducing the population of the pest.

Agriculture director-general Datuk Abu Bakar Mahmud dwells at length on the department's multi-pronged approach to combat the disease.

about 5,000 of them defied the Government's advice and planted padi after the Oct 31 deadline.

The heavens were kind enough to the stubborn lot: it rained and the crop was saved. But the strategy against the *penyakit merah* had failed.

The green leaf hoppers "danced in the rain" and the *penyakit merah* flourished.

"It is all right to influence the majority of the farmers to stop planting padi for a while to get rid of the disease but some of them are selfish and never willing to sacrifice a little for the farming community as a whole," admits an Agriculture Department field officer who prefers to remain anonymous.

Agricultural scientists suggest that farmers in the rice bowl follow a common planting schedule so that after the harvest the fields could be cleared and rested for some time to deny the hopper a breeding ground.

"This can only work in theory," laughs Encik Ismail Arshad, chairman of the Mada farmers' co-ordination committee.

He has his reason.

"If all of us plant at the same time and harvest at the same time, will LPN (the National Padi and Rice Authority) have the capacity to handle all the padi?" he asks.

Again, the economics of it has to be considered, says Encik Ismail. For example, harvesting machines are shared by

most padi farmers and if there is going to be a common harvest, "where are we going to get enough machines?"

"My farmers will always welcome any proposal to get rid of the *penyakit merah*, provided their livelihood is not at stake. We have made plenty of sacrifices but the end result remains the same: the hopper continues to exist and the *penyakit merah* destroys our crops."

In the same breath, he referred to the controversial IR-42, the padi variety which has proved to be resistant to the *penyakit merah*.

Many farmers planted the variety last season and, at first, everything seemed to go well until the harvested padi was sent to the mill.

Upon milling, the padi turned to powdery rice.

Following this, Agriculture Minister Encik Anwar Ibrahim, assuring the farmers that the losses this time will be absorbed by the Government, said the IR-42 variety will be dropped from the next planting season in March.

He advised the farmers to plant the MR-71 and MR-77 varieties which he said were also resistant to diseases and produced reasonable yields.

But, says Encik Ismail: "We are not sure they will be resistant to the *penyakit merah*. If they fail to live up to expectations, we will lose again."

VIETNAM

COMMUNIQUE ISSUED ON RICE BLAST, INSECT DAMAGE

BK051007 Hanoi Domestic Service in Vietnamese 1430 GMT 4 Mar 85

[Text] According to a communique from the vegetation protection department, rice blast has recently appeared on areas of 5th-month spring rice in the northern provinces. In Nghe Tinh Province, thousands of hectares have been affected with average damage ranging from 10 to 20 percent and 25 percent the highest. Scattered blight has been noted in some areas.

Small leaf rollers have affected 57,000 hectares of late rice in the Mekong Delta at a density of 20 to 30 insects per square meter. The worse hit area is along the central coast. In Quang Nam-Danang alone, some 200 hectares have been completely damaged. Stem borers at the root of rice plants in the northern provinces reached a density of 20 insects per square meter. Particularly, scattered butterflies have been seen in some areas.

In the Mekong Delta, insects have appeared generally on all ear-growing rice plantings at a density of 30 to 40 insects per square meter. Worms have affected 100,000 hectares in the central coast provinces. In Phu Khanh alone, some 4,000 hectares have been hit.

In the Mekong Delta, insects have damaged up to 6,000 hectares of late spring rice and have appeared scattered in Binh Tri Thien Province. Rice leaf beetles have appeared in small pockets on the areas of early 5th-month spring rice in the Bac Bo provinces. Moreover, leaf rollers and blac cut worms have caused damage to the areas of corn, tobacco, and other crops.

It is forecast that in the near future, rice blast and rice stem borers will continue to cause damage in the northern provinces and rice leaf beetles will increase on the early rice plantings. Army worms and diamondback moths will continue to cause damage to corn, tobacco, legumes, and vegetables. Rice blast, small leaf rollers, and stem borers continue to develop in the northern provinces.

Localities are reminded by the vegetation protection department of the need to continually step up measures to care for and fertilize rice to prevent and control insects. Local vegetation protection stations must firmly control the development of stem borers at the roots of rice plantings and accurately forecast the time when butterflies will appear the most so that an eradication plan can be established.

The southern provinces continue to spray insecticides to prevent and control rice blast and minimize diseases for the ear-growing rice plantings.

JPRS-TEP-85-007  
8 April 1985

VIETNAM

BRIEFS

THAI BINH RICE INSECTS--More than 2,500 hectares of 5th-month spring rice in Hung Ha and Quynh Phu Districts were damaged by stemborers and leaf beetles. Using 1984 experience, the vegetation protection stations of the districts guided cooperative members in eradicating the insects. The Thai Binh Province's agricultural supply company provided the two districts with more than 20 metric tons of insecticide to save rice. [Summary] [Hanoi Domestic Service in Vietnamese 2300 GMT 17 Mar 85]

CSO: 5400/4364

ZAMBIA

#### OUTBREAK OF DISEASE AFFECTS CASSAVA PLANTS

Lusaka TIMES OF ZAMBIA in English 4 Mar 85 p 1

[Article by Beatrice Mwali]

[Text]

ZAMBIA's plans to supplement maize with cassava as another national staple food by growing a fast maturing variety have been impeded by an outbreak of a disease which has attacked the crop in Luapula and Central provinces.

The disease—caused by bugs identified as milly and spider mite—is believed to have “crossed” into Zambia from Zaire. The disease attacks leaves and roots resulting in cassava tubers rotting.

Member of the Central Committee and Chairman of the Rural Development Sub-Committee Mr Reuben Kamanga and Agriculture and Water Development Minister, General Kingsley Chinkuli confirmed the outbreak of the disease.

The bugs first raided Luapula Province in 1983 affecting the areas around Luapula valley and along the border with Zaire before spreading to Mansa and the Copperbelt.

Farmers in the areas affected were urged to stop “exporting” cassava to other parts of Zambia in a bid to control the disease.

Speaking in separate interviews at the weekend, Mr Kamanga said plans to develop a faster growing type of cassava had been hindered by the disease while Gen Chinkuli said his ministry was doing everything possible to contain it.

Mr Kamanga said the department of agriculture had been forced to defer its plans to “propagate” the importance of growing the new cassava variety because of the disease.

The variety under experiment at Chalimbana plant centre in Lusaka matures within a year compared with the type currently being grown in Zambia which takes two to three years.

Mr Kamanga said the new variety would not be sent to the provinces until the bugs had been wiped out.

Gen Chinkuli said the Government was discouraging people from planting infected stalks

of the plant to control the pests.

"This of course does not treat the disease. That is why we have reported the matter to the International Institute for Tropical Agriculture (IITA) in Nigeria."

The IITA sent an expert to Zambia who is in Luapula Province together with Zambian officials to try and examine the bugs as another measure of stemming the disease.

"We are yet to receive a feedback as to the efficacy of this method. But it would appear that the situation has been contained as no news of further spread has reached us."

The minister stressed that since cassava had assumed greater significance in Zambia's food production programmes, he had given instructions to the

director of agriculture that more Zambians should be trained by IITA for the country to be adequately equipped to combat diseases.

Mr Kamanga said the department of agriculture had expanded the experimental centre to supply provincial centres with the new variety so that they would act as nurseries for farmers when the disease was eradicated.

He emphasised that the Party and its Government wanted to ensure the success of the new variety and efforts would be made to ensure that farmers interested in growing it were given branches free of charge.

"If people can have a cassava meal in areas where they can grow it, it can be as good as growing maize which matures in a year."

CSO: 5400/98

ZAMBIA

INDUSTRIAL POLLUTION DESTROYS AGRICULTURE

Lusaka TIMES OF ZAMBIA in English 7 May 85 p 4

[Text]

FUMES from Mufulira mine have destroyed more than three hectares of soya beans and vegetables at the council farm.

Farm manager Mr Addison Nkhata said the council had expected a good yield of soya beans but the crop had been destroyed by acidic fumes.

The high levels of acid in the fumes had affected trees and grass as well.

The fumes have also devastated large fields of tomatoes and vegetables in plots extending from the council farm to Mokambo border post.

Mr Nkhata said the farm was covered in smoke for more than six hours and there was nothing that authorities could do to save the beans from destruction.

The council planned to embark on a serious programme to grow coffee in compliance with a directive last year for local authorities to go into production of the crop.

Five hectares has already been cleared and what was left was for the department of agriculture to survey the area and send soil samples to Mount Makulu research station for tests.

Mr Nkhata said production would begin on a small-scale but would be stepped up annually.

The council's plans to increase its maize production this year were hampered by heavy rains which flooded half of the 20-hectare field so out of an expected 450 bags only 20 could be ascertained. — Zana.

CSO: 5400/98

END